MARYLAND

FARMER AND MECHANIC:

DEVOTED TO

Agriculture, Horticulture, Rural Economy & Mechanic Arts.

Vol. 1. BALTIMORE, DECEMBER 1, 1864. No. 12.

THE COMMENCEMENT OF A NEW VOLUME.

The First Volume of the MARYLAND FARMER AND MECHANIC closes with the present number. Starting as it did in exciting times, and under circumstances usually regarded as adverse to the success of periodicals of a purely industrial character, the patronage which it has received from all classes of persons interested in agricultural pursuits is no less gratifying than encouraging. It is, moreover, an evidence that the interest which is taken in all things that tend to the improvement of the soil and to the economy of labour is unabated by the troubles of the times.—We trust that we are not wrong in regarding it as a happy augury, and also as a warrant for believing that our subscription list will be largely increased before the commencement of the second volume. If our friends are satisfied with what we have already done—and we feel assured that they are so—will they not aid us, at this favorable opportunity, in extending the area of our usefulness? We know how much lies in the power of a single subscriber; how readily he can recommend a work of the kind to his neighbours, and with what perfect ease to himself he can send us personally a score of additional names. If but a few of the many who have welcomed the "FARMER" to their homes and firesides, during the past year, will take it upon themselves to exert that influence in our behalf among their numerous friends and associates, we should accept it as a kindly act and as one to be held in remembrance hereafter. We have no hesitation in making this request, for we are conscious that we have endeavoured to return value for value, and that our efforts to promote the best interests of our Farmers and Planters generally have not been wholly without generous recognition. It is only at the close of a current year, and at the commencement of a new volume, that we can most appropriately call upon our friends and well wishers to unite with us in the effort to enlarge the circle of our readers.—We make this request of them frankly, because we are aware how much they can aid us in the matter, and because we also have an abiding trust that a suggestion of the kind will meet with an equally prompt and cordial response.

THE AGRICULTURAL SITUATION---SMALL FARMS AND HIGH TILLAGE.

We are about to have a talk with our readers upon the agricultural situation in this State consequent upon the radical change which has recently been made in our system of labour. We do not propose to enter at all upon the policy or propriety of a change so sudden and so thorough, and, perhaps, we might justly add, so entirely for the most part, unexpected to a large portion of the farming community. We express no opinion on this matter simply because we desire to keep from our columns every thing that relates to politics or political questions.—Our sphere of duty is a narrower and, in some respects, a more useful one. Our special province is to elevate, as far as may be, the system of agriculture to the rank of a science; to lay before our readers every new theory or practical suggestion that has for its leading idea either the improvement of the soil or promises some advantage from which they would derive a benefit. At the present time the labour question presses upon them heavily and affords them just cause for anxiety. The manly way in which it has been met by the farmers of Prince George and other counties, offers a fair promise that the difficulty may at least be partially overcome by a more general adoption of the mode of hiring which they have proposed. There is however, another matter upon which they have not touched; but which remains to be dealt with boldly and decidedly. The most serious fault of our friends has been that they have farmed too much land. We do not say *tilled* it, for that implies thorough cultivation, and such tillage as will produce the heaviest returns from the smallest amount of land can never be carried out to perfection without an

adequate number of field hands, and a corresponding abundance of manure. The true remedy for a deficiency of labourers is to crop fewer acres; to substitute labour saving machinery to its utmost available extent, and by high manuring and careful cultivation, to bring the acreable product of every field up to its maximum capacity. The average crop of wheat in the best farming districts of Europe may be safely set down at forty bushels to the acre. In many instances the product is still greater, and by spade husbandry sixty bushels to the acre have been raised. Now the natural quality of the soils there, is, if any thing, inferior to the better class of wheat lands with us; yet with industry and perseverance and diligent care in the eradication of weeds and by a concentration of labour and manure upon limited areas, they make one acre of land produce nearly as much grain as four acres yield with us. Surely this is an example that is worthy to be followed by us, and especially is it so at this time, when our farmers must depend wholly upon hired labour, and when hands are also scarce and wages correspondingly high. It follows too, if one hundred acres can be made to produce an amount of grain equal to the product of four hundred acres under ordinary circumstances, and if, by this system of high manuring and careful culture, the land is enriched and correspondingly increased in value; that we have in these facts a solution of the labour question and in the sale of the surplus land thus thrown out of tillage, a means of renovating and permanently improving the remainder.

Preparing Posts.

If you set your posts in a *reversed* position, that is with their *top or upper* ends down in the hole, it will prevent the capillary action of the post from imbibing or drawing up water or moisture from the soil, and so cause your post to rot or decay less rapidly at the surface of the ground than it otherwise would. So when your *subsoil* abounds in water, whose freezing is apt to heave your posts up out of their places in winter, your best way of preventing this upheaving will be for you to make a *deep hole* with a smaller-sized post-hole augur right down in the centre of the hole intended to receive your posts and fill this smaller hole up with round or roundish stones, as this will allow that subsoil water to sink away and disappear from your posts that would otherwise upheave your posts in freezing. Some recommend putting a coat of tar around that part of the post which, when it is set, will stand *just at and near the surfcae of the ground*, and then setting it *afire* and leaving it to burn until that part of the post is well charred or charred wood, that is wood whose outside is burnt into a black crisp will resist moisture and decay far longer than any uncharred wood can.

HINTS ON COUNTRY HOUSES.

Number Twelve.

A SUMMING UP.

In bringing these papers to a close it may be of advantage to our readers that we should go briefly over the ground we have already traversed together, and bring together, by way of summing up, the points and suggestions which it is most important that builders and improvers should alike bear in mind. Where old houses are to be partially remodelled and extended, the remarks relating to site and aspect—these being already fixed—will not, of course, apply. It may be possible, however, that the original builders may have observed the rules, either knowingly or otherwise. In that case what still remains to be done in accordance with the principles of correct taste will be comparatively easy of execution. Thus premising, our final remarks may be most conveniently placed under the following heads:

SITE.

The selection of the best site for building purposes is at all times an important matter, for the dwelling should always occupy the healthiest situation, but should not be too much embowered in trees, for sunlight and free air, are as essential to health as a certain amount of shade is to shelter and comfort. The position chosen should be near to water, and if the springs from whence it is to be drawn, though at some distance from the house are at an elevation above it, the water can then be distributed wherever it may be required through pipes and by natural flow. Where this can happily be accomplished much labour, expense and annoyance are saved; whilst the overflow from the tank may be carried off to the Dairy, or, if the barn and cattle sheds are within easy distance, and situated at a point below that on which the house stands—as they should be—the surplus water can be conveyed there also. If on the other hand, water is only to be had at a level lower than the house, and after leaving the fountain head has volume enough and a sufficient fall to work a ram, the same end may be attained but at a greater cost. We may here state, for the benefit of those who have had no experience in the matter, that a steady flow of one inch of water, provided it be permanent, will work a Clark and Steinmetz ram a distance of eight hundred feet, and will raise a stream of water sufficient for the uses of a family of a dozen persons to a height of two hundred feet from its source. Other rams may be equally good in some respects; but where the quantity of water power is small we know of none, and we have tried several, that will give so much satisfaction as the Clark and Steinmetz.

Turning now to the dwelling,—the situation chosen should be more or less elevated, or if in a valley, if circumstances permit, should occupy the highest knoll, so as to allow of complete drainage. The best location for a house is where the soil is a light loam with gravel underlying it. This assures perfectly dry cellars, and of course, equally dry apartments. If the soil is of a heavier texture, or is naturally damp, the only remedy is the liberal use of underdrains, and no pains or expense should be spared to make these as perfect as possible.

ASPECT.

We know how difficult it is to make a selection of the best aspect for a house. Many obstacles—such as abrupt hills, the trend of the public road—the necessity of adopting a certain line of approach for the entrance way or carriage drive; objectionable features in the landscape, &c.—all these may either tend to prevent it or render its adoption unadvisable. But where no such objections exist, decidedly the best aspect is to the east or southeast—that is to say, facing the morning sun. What are called "the living rooms," or, in other words, those apartments which are most frequently used, should, by all means, front in the direction indicated, even if the exigencies of the location demand that the main entrance to the house shall face towards the south or southwest. But whatever the aspect, the house should be protected on the north and northwest, either by high hills or by a dense plantation o deciduous and evergreen trees. These break the force of the winter winds and thus add greatly to the comfort of the inmates at the most inclement season of the year. Fronting the east and south, the outlook should be comparatively open; only such trees being retained or planted—as the case may be—as would serve to temper the sun's rays, without entirely obstructing them. It is not well, however, to have any deciduous trees of large growth in close proximity to the house, for the leaves blown from them in autumn will be found to constantly choke up the spouts and gutters, and will thus be a source of endless annoyance and trouble.

CONSTRUCTION.

A square house is the cheapest and roomiest—but it is also the ugliest. Its defects, however, can be measurably corrected by an experienced architect. A many angled house is the costliest to build, but it is also the most picturesque. In these matters the taste and means of the improver, together with the uses to which the house is to be put should govern. Construction includes style, and what would be appropriate for a villa residence would be out of place in a farm house, and would be altogether unfit for a simple cottage. The sense of fitness here applies most forcibly, and its requirements demand that a complete classification should prevail, and that whilst the farm house should be simple, sturdy and substantial, yet not without its appropriate ornamentation, the villa will allow of points and gables; of oriels and verandahs and of any amount of decoration that is consistent with its style, and in accordance with the rules of good taste. But whether villa, farm house, or cottage, the time has now arrived when all our country dwellings should be constructed of less perishable materials. Stone is now cheaper than wood, and stone with its lower courses laid in cement is not at all open to the objection of dampness to which walls of this material imperfectly constructed are, to a certain extent, liable. A stone structure is a permanent one. Well built, and the mortar once hardened, there is no shrinking or warping, as is the case with wood. Its color harmonizes with the landscape, and the only paint required is for the porches, the doors, the windows and shutters, the window hoods, the woodwork casing, and the brackets or cantilevers beneath the overhanging eaves—for in our climate the roof should invariably be drawn over the walls and gables a distance of two feet. To build with brick is more costly, and besides this, brick houses, in our bright climate, stands like a red blotch amid the surrounding greenery. Brick, therefore, if used, requires to be painted of some soft neutral tint, the frequent renewal of which increases the expense considerably.

COLOUR.

The best colour for a country house is a cool grey or a warm fawn. Of the two, we prefer the latter.—The color of the window frames and doors, and indeed of all the exterior decorations may be either of a darker or lighter tint, but should vary a shade or two, according to the parts to which it is applied. The styles of the doors and windows should be rather lighter than the pannelling. The brackets or cantilevers a shade lighter than the cornices and casing, whilst the pillars of the porch should correspond in tone with the brackets, as should also the hand rail; but the lattice work should be a shade or two darker. We have thus gone briefly over the ground we have already traversed in preceding numbers, where our reasons are given more in detail, and if from these imperfect hints we shall have succeeded in awakening a better taste for country architecture, or furnished suggestions that may lead to a more thoughtful consideration of this important subject, we have done all that we hoped to do, and our labour has not been entirely in vain.

Depend upon it, a long wet spring sours the soil, so that bad effects to vegetation are the result.—Well-drained soil, however, is free from this evil.—To this we can testify accurately. This is one of the good effects of draining.

ELEMENTS OF LANDSCAPE GARDENING.

Number Twelve.

RESUME AND CONCLUSION.

In all that we have said in regard to Landscape gardening in previous numbers of the FARMER, we have aimed at giving plain and practical directions for the improvement of such portions of the grounds as might in a modest and economical sort of way, be appropriated to decorative purposes, and have studiously avoided all scientific disquisitions, as being foreign to the purpose which we had in view.—Wherever enlarged areas are to be laid out, the skill of a practical landscape gardener must and should be brought into requisition. But there is a large class of persons whose desires tend toward the improvement of their homesteads, so far as the immediate surroundings are concerned, and it is to these persons that the articles we have written were more especially addressed. We see no reason why the old order of things should prevail any longer; or why our farm houses, our country cottages, and the numerous villages and small towns scattered throughout the older settled States, should not rival in beauty, and compete in comfort and picturesqueness, those of Europe. We have all the elements in perfection which are demanded to accomplish this result. We have brilliant skies, soils naturally of the highest fertility, native deciduous trees, all of them equal, and many of them superior in beauty to any of those found elsewhere, we have evergreens in great variety, and flowering shrubs, both evergreens and deciduous, which are unequaled for their exquisite tints and, yielding in well selected shrubberries, more or less bloom from April to December. What we have most wanted heretofore has been the taste—not the will—to make liberal use of these rich gifts. In this respect however, a great advance has been made of late years, and if we have sometimes carried our architectural decorations into extremes, and have sometimes been fine and flashy when we should have been contented with less ornament better applied; still, to have broken even violently through the old routine, has been a vast step gained, and after a little while a reaction will set in which will tone down our extravagancies and place us on a safe footing and in the right direction. As it has been with our modern architecture, so also has it been to some extent with our attempts at landscape gardening. We have endeavored to do too much. Our ambition has been to obtain immediate effects, and so we have crowded in trees until the land could bear no more of them, and by leaving nothing to time and their development, have spoilt many a good plan for over-haste. It was erring, it is true, on the right side; for in matters relating to the improvement of country residences, it is better to do too much than too little. Moreover, a taste for landscape gardening with us is still only partially developed; and throughout the greater portion of the country little or nothing has been done thus far in the way of improvement. In the generality of cases, a straight dirt walk still leads to the house. A straight dirt road follows the line of fence, sometimes cut with gullies and sometimes rough with unbroken stones hauled directly from the fields and deposited in the ruts and broken places, without regard to anything more than a temporary convenience. The trees, if there are any about the house, are old and shattered by storms; the grass plat, that might so readily be formed into lawn is weedy and neglected and is but too frequently used as the pasture lot for a favorite horse or cow. What few flowers there are consist of the commoner sorts —the hollyhock, the marigold, the phlox and such like. The only flowering shrubs are the lilac, the snowball, the mock orange, and, probably, the scented shrub. And these, for the most part badly tended, grow wild, and lose thus a portion of their natural beauty. If there should chance to be a porch to the house, roses of the commoner kinds may, it is very likely, be found alongside of it. But they too are untrained; and instead of clothing the porch with their green leaves and fragrant flowers, are suffered to throw out their long shoots in every direction unpruned and slovenly. Yet what a difference could be made in the appearance of such a place in the course of a few years, if it fell into the hands of a judicious improver. The entrance way from the main road would have its neatly painted gate and its solid posts plainly capped. The roadway, constituting the approach to the house, would be widened to not less than ten feet. It would wind by gradual curves to the front door, and sweeping thence by a circle or ellipse, would connect with a back road to the stables and offices. On each side of the entrance gate trees would be planted thickly, and trees and shrubs in groups or singly, would give diversity to the road in its approach to the dwelling and beauty to the landscape of which they would form a part. The rear of the house would be protected from winter storms by masses of evergreens and deciduous trees intermixed, and the stables and offices would be shut from view by dense shrubbery at the angle of the house, through which the back road to the barn yard winds. The lawn would be carefully set in grass; roads and walks made firm either with gravel or hand packed stones blinded with rotten rock, or with road metal; shrubs would be interspersed about the lawn, with here and there a handsome deciduous tree, and here and there an evergreen; all unsightly objects in the view would be planted out, and all the beauties of the landscape developed through appropriate vistas. Climbing

vines and roses would be trained to the porches, and flower beds cut in the turf of the lawn, would add beauty and fragrance to the scene. This is what might be done—and it was to promote this end, and thus to foster a love for the country home and its belongings, that these papers have been written.

The Work Performed by Roots.

Roots have mouths—the finest roots. And what are mouths for, but to eat and drink?—for these mouths don't talk. Would they could. How they would scold for not having food and drink enough. Now, these little mouths suck up only what is in their way. The side-ground retains all its richness—only what lies before the little root is taken up.—So you see there is much strength left in the soil after a crop, or between the roots. "Pity this can't be had," you will say. Yes, but then the plant will put out new feelers, and thus keep on till it gets pretty much what strength there is. Hence, forest soil is not so rich as our cultivated fields. One season, however—one crop only—exhausts but little of the soil, as it has comparatively but few roots to penetrate it all. If we give an orchard a coating, and the soil is disposed to be leachy, sandy, you will see the benefit. If it is loam, humus, you will see but little of it, unless your roots are close to the surface, which is not generally the case. In gravelly soil, you are wise, if you give your stunted trees a coat of well-rotten manure. But your manure will benefit only the grass and grain you may put in your orchard, if the roots of your trees are deep, and the soil is a compact loam or clay. When clayey and compact—as is apt to be the case with clay—your trees receive no good at all from the manure. Native, deep, rich soil, is always the soil for trees.—*Valley Farmer.*

Renovation of Worn-out Lands.

With reference to the queries of "R," of Dedham, in your paper of the 8th inst., as to what should be done for the renovation of the land worn out by severe cropping, I would say to him—If not already drained, *drain it*. That process will place it—no matter what state of exhaustion it is in—under the most favorable conditions for successful cropping. Let "R" try the effect of under draining an acre or two *now*—making the drains three feet deep and forty feet apart, and the comparative value of the drained and undrained portions will show themselves next spring greatly in favor of the former. I have tried this plan and know its value. After draining "R" may plough as deep as he pleases—the deeper the better.

Good drainage is equal to half manuring any time—and, in a dry season, much more valuable. —*Mass. Ploughman.*

Our Agricultural Calendar.

Farm Work for December.

FATTENING HOGS.

It is somewhat late in the season to undertake the fattening of hogs, for as the winter advances and the cold strengthens, the difficulty of speedy fattening is greatly enhanced, and the amount of food required much larger, than if the process had been carried out during the preceding month. Still, if the hogs are not fat enough to kill, feeding in extra quantities must go on until the required weight is obtained. How hogs are to be treated, and the best mode of providing them with food and shelter have already been given in the two preceding numbers of The Farmer, and to these we now refer the reader.

WINTER PLOUGHING.

We again make the remark, that if the winter is an open one and the land is not too wet, stiff clay soils are greatly benefited by winter ploughing.—On the other hand it is much better to let sands and gravels and sandy loams lay over until the spring.

MILCH COWS.

Milch cows now require increased attention.—They should be kept clean, should be well shedded and bedded, and their dry forage should be alternated with messes of slops and roots. See also that they have free access to pure water and occasional exercise.

YOUNG CATTLE AND COLTS.

We have already given in our November number plain directions for the winter treatment of young cattle. It is sufficient therefore, in this place to state, that whilst food should not be lavishly supplied them, they should yet have enough and of a quality best calculated to keep them in good health and to promote their steady growth. It is but too customary among us, to keep young animals throughout the winter on coarse dry forage and with a view to raising them economically. Nothing can be less so or more pernicious. All young cattle should be well, though moderately fed, and in their subsequent growth will amply repay the slight additional expense thus incurred. They should have hay or fodder of good quality three times a day—should be well protected from the weather by warm shedding—should have a trifle of grain furnished them at least three times a week, and water at every meal.

FIRE WOOD.

See that an ample supply of fire wood is provided for use during the ensuing summer and the winter following it. At the same time, we are decidedly of opinion that wherever coal can be delivered at a cost not exceeding ten dollars a ton it is the cheap-

est and best fuel a family can use. The adoption of coal would, moreover, tend largely to prevent that enormous destruction of woodland which is now going on all over the country, and which is not only gradually affecting our climate, but by the greater evaporation consequent upon the larger area of bare surface that is exposed to our summer heats, the springs and streams and water courses are gradually, but surely lessening in volume.

SHEEP.

See that these animals are not left exposed to the winter storms. They require sheds, and their bedding should be renewed at least once a month.—They should have a liberal supply of pure water provided for them; and for food, three pounds of hay daily, or its equivalent in grain and coarse fodder. See also that rock salt is placed under cover for them at points where they can readily get it at all times.

HARVESTING CORN.

If the corn is not already harvested, haul it in at once, husk it, and store it carefully away.

Brood Mares, Cows, and Heifers in Calf.

These animals will require more nutritious food than the other stock that may be kept over the winter. In all things else their treatment should be similar to that suggested for the care and protection of milch cows and young cattle generally.

FENCING.

See that all the fencing stuff that may be required for use during the ensuing season, is promptly gotten out and hauled to the barn yard, or open shedding, to be fashioned into posts and rails, when the weather is too inclement for other work to be done.

GATES.

Get rid of all bars upon the farm as early as you can make it convenient to do so, and supply their place with gates.

ACCUMULATING MANURE.

Use all your spare time in collecting every kind of rough material about the farm to form into compost.

WAGONS, CARTS, TOOLS, IMPLEMENTS.

Examine these and have them repaired, if repairs are needed.

DRAINING AND DITCHING.

See that all your wet low laying lands are carefully drained, as the opportunity and season offers.

Take Care of the Dahlia Roots.—The roots should be dug up as soon as the first hard frost has spoiled their foliage. Cut the stem about six inches above the tubers, then lay them up to dry. After they have become dry, pack them in dry sand in the cellar, there to remain till they begin to grow in the spring; then plant them out in the borders, previously dividing the roots, if an increase is required.

Garden Work for Dec.

There is nothing that can be done of any importance in the open air during this month. Those who have frames—and there are so many cheap ways of making the latter, that no garden should be without one or two at least—will still find the following matters to engage their attention.

Cauliflowers in Frames. — Uncover the frames when the plants are growing during mild days, and slightly elevate each sash, by putting a wedge under it at the point opposite to the quarter from which the wind may be blowing. The occasional introduction of fresh air, but not in such quantities as to chill the plant bed, is decidedly advantageous in strengthening and invigorating the plants. In the afternoon let down the glasses and cover the frames with matting or straw, as usual.

Lettuce.—In the Middle States lettuce plants will stand in the open air throughout the winter with the assistance of a light covering of straw or brushwood. Their growth may be greatly facilitated by the use of a frame. They will, however, require very little heat,—the less in fact the better, provided the frames are well protected by mats in cold weather.

Small Salading.—Seeds of all descriptions of small salading for winter use should be sown in hot bed frames, covered in bad weather by mats or straw, but during mild days opened a little to admit air or light.

Stiff Clay Beds —If the garden soil consists in part, or in whole; of stiff clay, break it deeply, manure it heavily, and leave it in the rough for winter frosts to act upon.

Spading and Manuring of Beds.—Much time may be saved in the spring when labour presses most heavily, by clearing off carefully all the garden beds late in the autumn, and after manuring them thoroughly, spading them deeply, and preparing them in the very best manner for seeding down at the very earliest opportunity that the season opens in the spring. Indeed, to let a garden run wild with its dead vines and all the remains of the preceding crops—the pea sticks and bean poles standing thro' the winter—the strawberry beds run to grass and weeds, and the raspberries and other small fruits untrimmed, evinces exceeding bad management and greatly tends to increase the spring work.

Fun should be cultivated as a fine art, for it is altogether a fine thing. Who ever knew a funny man to be a bad one? On the contrary, is he not, nine times out of ten, generous, humane, social, and good? To be sure he is. Fun—it is a great thing. It smooths the rough places of life, gives the world a round, jolly countenane, and makes the girls as pretty as June roses.

LAYING DOWN A LAWN.

We cordially commend the following article, from the *Gardener's Monthly*, to the attention of those who are about to lay down a lawn in the best manner. We do not, however, regard it as at all essential to the process that two green crops should be ploughed under preparatory to seeding. All the time and labour required to do this, may be readily spared by the liberal use of a compost made of well rotted manure, wood earth and unleached ashes, and the result, whilst attained more quickly, will not only be more beneficial to the grasses, but the effect will also be more permanent. To the use of Brewer's grains we object entirely. In all other respects, the suggestions of the writer are excellent.—*Eds. Farmer.*

"This is an important subject, and if properly treated, it may be the means of great improvement. I would lay down a lawn of a hundred acres with the same care as one of a quarter of an acre; as manures are generally scarce and expensive, I would do this way—where the surface and virgin subsoils are loamy, trench sixteen inches deep, open a trench two feet wide of a certain length, and put the soil along the end of the same length, to finish when coming back with that piece; cut the soil down with a broad-edged mattock, break it fine and mix thoroughly; throw it over with shovels (a better and more expeditious mode than digging with spades), make up slight inequalities, and gather out roots of perennial weeds. If stones were few and no larger than a man's two fists, put them in the bottom of the trenches; if large, haul them and the weeds away at once, so as not to tread down the soil after it is trenched; have air slacked lime under cover, and spread it over the surface of the trenched soil, say forty bushels per acre; when at the end, open another trench the same length and fill it up, and trench the opposite way. Drain the lands where they needed it before trenching; if done in fall, winter, or early spring, sow it down thickly with oats, and when it shows ears, plow it under, (using the drag chain at the plow to fold the crop into the furrows,) and after lying a fortnight to ferment, sow it over with super-phosphate of lime, and sow thickly with buckwheat; harrow and roll it down, and when it comes up, sow it over with guano. When the buckwheat shows bloom, plow it under, and let it lie three weeks to ferment. By this time it will be the first of October; harrow and roll; and stake out where all the trees are to be planted; dig all the holes, and plant the evergreens at once—planting the deciduous trees and shrubbery first of November. The following spring harrow along and across, sow the grass seed, and roll it firmly down; when it is an inch long, sow it over with super-phosphate of lime or guano. Mix the grass seeds with six times their bulk of finely broken friable loam, and it will sow more evenly; the seed should be sown thickly, as by that means the sod is always greener, the grass more nutritious and the blades finer. It is almost universally a fault to sow all seeds too thin. I would not sow clover with the grass, and would sow only one kind of grass. Some kinds of grasses thrive better upon one kind of soil than another, and this should be considered in making a selection. Seedsmen are generally good judges of the kinds adapted to different soils, as they have not only their own opinion but those also of their customers to guide them.

"The deepening and enriching the soil and freeing it of weeds by summer plowing, are essential to success. The most effectual way of getting clear of weeds is by preventing their propagation. As all our pleasures and profits follow prudent outlay, so it is with a lawn. I have laid down lawns as above directed, and cut them eight times, when ten inches long, the same season. Some may hesitate at the idea of trenching a hundred acres, but is no uncommon thing for it to be done, nor is it so expensive or slow a process as some may imagine: money cannot be more wisely invested.

"Where trenching is not allowed, plow a foot deep, the after-management to be as above directed, gathering off all roots of perennial weeds every time the land is plowed and harrowed; and as all annual weeds are prevented from seeding by being turned under, with the manuring the garden crops, the preparation of the soil will be complete. Upon shallow sandy soils, plow according to the depth of the soil, as prudence will direct; instead of oats, sow strong-growing red clover, and dress it with plaster of paris mixed with marl, and plow it under when a foot high; sow the buckwheat crop, and dress the same with marl and lime mixed (ten of marl to one of plaster and lime); roll more firmly than heavy soils, as that will make them more compact and more retentive of moisture.

"The next consideration is, how to keep the lawn in good order. Proper shelter is the first requisite. Without that other things will have less effect. A small lawn should be enclosed with live hedges and trees on the outer edges; large lawns should be wholly encircled with belts of trees, twenty or thirty feet wide and closely planted. The belts on the north and west sides should be double that width. It is the sudden gusts of drying and withering winds of summer, and the furious, blasting winds of winter, that destroy our grasses; but the trees break their force and renders them harmless. The beautiful green turf for which England is remarkable, is owing to the shelter the lawns get from the trees. Meteorologist say that our winds are dryer and more withering than those of any other country

of the same latitude, hence we have more need of shelter. The grass should be mown frequently in hot moist weather, or the roots will be destroyed by mildew; and more readily so, if unfermented or strawy manures are used. The mildew grows in moisture and darkness, and luxuriates on decomposition: dry air and sunshine kill it.

"The fertility of the soil can only be kept up by top-dressings of manure and fertilizers, all of which should be applied in fall, so that the snows and rains may wash their soluble ingredients into the soils, which gives life to vegetation in spring.—There are several materials used; they should all be prepared some months before being used; so as to kill all weeds in them. Well-rotted barn-yard manures are best. Throw them loosely into heaps in spring, and turn them over twice or thrice during the summer, always turning the inside outward, to destroy all weeds and seeds by fermentation. Leaf mould, heaped up with its bulk of soil in the woods, and ten of that to one of lime well mixed and frequently turned. Plow up a headland of a farm lot, and put lump lime along the middle, then shovel up the soil and break it fine over the lime in the form of a steep ridge; do this in spring, and if the soil is moist the lime will be slacked in a fortnight; then turn it over, mix well; every time it gets covered with weeds turn it over: one of lime to twelve of mould, and four of tan bark that is well rotted, greatly increase the fertility of the heaps. Sawdust, too, well-rotted and mixed in such a heap is a valuable addition. Lime and plaster mixed with marl some months before using and frequently turned over, makes a valuable compost for sandy lands.—Where any of the above are used, the lawn should be well scratched early in spring, so as to spread the top-dressing more thoroughly, which may have been lumpy when applied. Stones and other hard substances should be gathered off the lawn, so that the scythe or mower will not be injured; and when the land is dry enough, and all heavy frosts are over, roll the lawn firmly down. One of the best top-dressings I ever used on a lawn was *grains from a brewery*, it makes a luxuriant growth, and imparts a deep, rich green to the grass. I have also used wetl fermented *hops* from the brewery with good effect: they seem to kill all the worms in the soil—wood ashes are also very beneficial.—*Walter Elder.*

Life in the country may be one of the richest on earth, but it may also be one of the poorest. If the great book of nature be open to the eye of him who resides there, and illumined with the light of heaven, from his little knoll he can see and enjoy all the glory of the world; but if he sees in nature only the potato-field which gives him food, then is this golden vein closed for him, and he himself stands like the potato plant, fast rooted in the earth.

NOBILITY OF AGRICULTURAL PURSUITS.

There has been a growing dislike on the part of our farmers' sons and daughters, to the quiet, peaceful pursuits which have surrounded their early years with all the comforts of life, if not its luxuries.—Sharing in the fast spirit of the age, they have been unwilling to wait the slow but sure gains which have brought a competency to their ancestors from tilling the soil, and, indulging in dreams of suddenly acquired fortunes, and ambitious for luxury and display, have hastened to engage in trade, or swell the crowded ranks of the professions in our large towns and cities.

Much has been done by the noble efforts of our rural press to stem the disastrous tide, but yet a still more potent power has been needed, which the war has supplied, by the uncertainty and instability with which it has invested other avocations, and, also, by rendering agricultural pursuits vastly more remunerative than before.

Estimates made from close observation go to show that ninety per cent. of those engaged in mercantile business die insolvent, while more than that proportion of farmers die, either free from debts or with more than property sufficient to liquidate them. The majority, indeed, do not acquire vast fortunes, but seem to occupy the enviable position coveted by Solomon, when he said, "Give me neither poverty nor riches," and in that he displayed his great wisdom, as either extreme leaves its possessor a sure prey to disquietude.

But weightier inducements than the greater certainty of a good living enjoyed by a farmer exist in the happy state of independence realized by him.—Not relying on the patronage or good will of his fellows for prosperity in business, he has no occasion for disguise, and can afford to be frank and outspoken in his sentiments and feelings, thus developing a greater manliness and nobility of character.—The intelligent tiller of the soil is bronght into contact with the phenomena of the three great kingdoms with which we all have to do. He has a fine opportunity to observe and study the secret processes of nature, whereby she produces by subtle forces, in the most perfect obedience to fixed laws, all the results going on to perfection, whether apple-making or corn-producing.

It is true, a farmer may be so dull as to see no beauty in these things, any more than the blind man does in a gallery of fine paintings, and is therefore no more charmed and delighted by what he sees and does, than a deaf man would be in a concert room of the most exquisite performers. But these are the exceptions, not the rule, and in the majority of cases an intimacy with nature exerts its legitimate influence in elevating and beautifying the character.

The theatre of the farmer's labor is remote from scenes of temptation that might lure him from the paths of virtue. He pursues his daily toil amid all the refining influences of his home, with his wife and little ones near him, perhaps sharing his labors, at least lightening them by their cheering smiles and words of love and sympathy. His daily walk is removed from the haunts of profanity, licentiousness and bacchanalian evil, where the soul is contaminated by familiarity with the gross and dark sides of human nature; amid the calm repose, the benign peace and purity of nature, he is drawn into harmony and communion with the great and beneficient Father of all.

Agricultural pursuits also tend to cultivate a feeling of dependence upon an over-ruling Providence. When the farmer has prepared his soil and sown his seeds, he can do little more. He must wait for a higher power to waken into life the seed germs.—It is not human skill that makes the radical to descend and the plume rise; that causes the sap to flow, the roots to push out their fibres into the soil in search of food; the buds to expand, the branches to extend, and flowers and fruit follow each other in succession. Human power does not bring down the needful rains and dews, neither does it give or temper the light and heat of the sun.

When the stated order of things is interrupted—when the showers and dews are withholden, and the thirsty earth is parched with drouth, or when the rain descends in torrents, or the sun hides his face, and blighting winds and ultimely frosts descend—how utterly helpless is man. And when all circumstances combine to favor the farmer's operations, how can he help seeing the hand of Providence—a hand co-working with him and blessing him continually?—*Western Rural.*

Salting and Packing Pork.

I will tell you my mode after an experience of forty years. I allow the hogs to cool after killing—take out the bones (ribs and spine); cut off the hams and shoulders; then cut the side pork into pieces of convenient width; put in a quantity of salt in the bottom of the cask; then put in a course of meat; laying the pieces on the edges; then a covering of salt; then another course of meat and so on until the cask is full. The whole is carefully kept covered with brine as strong as salt and boiling water will make, skimming the boiling brine so long as anything rises. The brine is put on cold, and I am careful to know that there is always undissolved salt in the barrel. It is not found necessary to scald the brine in spring. I sometimes use saltpetre, and sometimes not. Hams and shoulders are salted in separate casks.—*Selected*

THE WHEAT PLANT.

Is it generally known how many grains a full head or ear of wheat ought to contain? or in other words, what is the utmost capability of production of a normal head of wheat?

A normal head of wheat is one which has all the cells for containing the grain completely filled with perfect grains. Such a head it is believed cannot be found in the best crops in the country. This may be a bold assertion, but it will be maintained until the contrary is proved.

Take the fullest head of wheat you can find, examine it closely, and it will be found at each joint to have two empty cells. These two empty cells can by proper cultivation be filled; but if they be filled, the joint on the head will produce two other empty cells—which it is fair to believe could also be filled.

On examining the construction or organization of a head of wheat, it will be found that each joint on the stem of the head generally, in what is called a full head, has three cells containing grain and two empty cells. The number of these joints on the head is from 15 to 21. Take the highest number, 21, and multiply it by three, the number of grains to each joint, and you have 63 grains as the full number contained in the head. The head, however, has two empty cells to each joint—there are then twice 21, equal to 42 grains, missing in this full head.

There is an organization for five cells all capable of producing grains, and the head should have produced 105 grains—that is 21 joints with 5 grains each, make 105 grains.

Experiments made this year show that three grains to each joint on the head, is not the full number which proper cultivation can produce, as four grains on many of the joints were produced in a small quantity of wheat. The heads, which produced four grains to a joint, had two empty grain cells to each joint, which would give six cells to a joint—thus the capacity of such a head would be 6 multiplied by 21 equal to 126 grains.

As by increasing the number of full cells from three to four, there were still two empty cells, it would seem probable that if you could fill the six cells, there would still appear two additional empty ones. If this be so, it will be a long time before a full normal ear of wheat can be obtained.

You are respectfully requested to call the attention of farmers to this matter, and advise them to carefully examine their crops of wheat, in order to convince themselves that none of them have realized at most more than half a crop, and few of them that much.

Ask them to experiment on small portions of their next crop—say a few square feet portioned off by stakes and twine—and to keep a record of the result.

It is natural to suppose that plants require for their full development different kinds of nourishment at certain periods of their growth. It would therefore be well to apply the manures or fertilizers experimented with at various periods. The ground being supplied with the usual quantity of barn-yard manure and the seed sown, the first application might be made sometime after the seed has come up and before winter sets in. The next application might be made in the spring when the plants begin to grow; and the next when the head is in the sheath of leaves and before it comes out. What substance should be applied is left entirely to the judgement of each one.

Experiments conducted in this manner will certainly lead to a good result.

A cheap fertilizer will be easily made from human urine, combined with other cheap substance.—Urine in its fresh, unfermented state is acid and is injurious to plants; when fermented, however, it becomes alkaline, and then is one of the best stimulating and nourishing manures. Quick lime, slacked with urine, produces an immense amount of ammonia. Fresh urine with the addition of sulphuric acid preserves ammonia. Urine, quicklime, sulphuric acid, nitric acid, and charcoal pulverized, (the acids being mixed, the urine and that mixture with the lime and charcoal,) make a compound containing, nearly everything a wheat plant requires. The addition of silicate of potash may be serviceable. Its action is to prevent the plants from growing too high, while it thickens and strengthens the stalk.—Gunpowder, common salt and a great number of other substance might be used in experimenting.—Barnyard manure must not be omitted, though it has not hitherto produced full crops.

Lime, urine, nitric acid, sulphuric acid, charcoal, silicate of potash, (made by boiling sand and potash, in a large quantity of water for 24 or 48 hours) are comparatively cheap materials. They can be combined in different proporions. Carbonate of soda, nitrate of soda, nitrate of potash, might also be used in various compounds.

These are merely suggestions without any attempt to dictate.

Let every experimenter try to find out what the plant wants, and when and how often it needs nourishment or stimulants, and some one will succeed.

This manuring once and leaving the plant to take care of itself, cannot be the true mode of cultivation. Farmers would do well to reflect seriously on this matter—it is of vast importance to them.

If this paper will induce some one better qualified to place this matter before the farmers in such a manner as to cause them to act and do their best to increase their wheat crops, without resort to expensive manures, the writer will consider that he has not troubled you in vain.—*Cor. Ger. Tel.*

How to Increase the Product of Sorghum and Imphee.

We copy the following from the "Sorgo Journal," and should suppose it well worthy of careful experiment, to ascertain by topping the cane at different periods of its growth, whether any, and how much loss there is of saccharine matter, resulting from the maturing of the seed.

Although, among the merits of the Sorghum, the value of the seed has been prominently taken into account, it has always seemed to us there was a possibility of its being at the expense of the syrup, either in quantity or quality. It is so with other plants; timothy, for instance, which, ripening, leaves the stem of little nutritive value, and we always have understood that the inferiority of our flax fibre was owing to the seed being allowed to remain and mature. This is said to be one reason why Irish Linens are better than our own. They do not, in Ireland, permit the seed to ripen when the fibre is to be used for manufacturing purposes. All the processes of nature tend towards the reproduction of the species, through the full ripened seed. This being accomplished, the plants (annuals) are exhausted, or, in other words, die. The strength and vigor of the plant being thus concentrated in the seed, it is reasonable to presume that other parts must suffer in the process of maturing it. We are not aware of any carefully conducted experiments to test this matter in the Sorghum, it having been taken for granted that the seed, no less than the stem, leaves and bagasse, or refuse after grinding, were all parts of the plant, convertible into use for man :

"I wish to call the attention of cultivators of Sorgo and Imphee to what appears to me to be the chief hinderance in the way of making sugar, and also to show that one half of the sugar of the cane is wasted, as at present managed. You may think this a rash proposition, but I will proceed.

"The seed on an acre of good Sorgo is estimated at about thirty bushels, weighing forty pounds to the bushel. Now, agricultural chemistry shows us that sugar in the stalk is for the purpose of forming starch in the seed, and that it takes more than a pound of sugar to make a pound of seed; so that on an acre of good Sorgo near 1,500 pounds of sugar are used in perfecting the seed.

"In common corn, if we prevent the ear from forming, the sugar, as almost every one knows, remains in the stalk, and travellers from China and South Africa tell us that the natives of those countries are particular to prevent the Sorgo and Imphee from going to seed. It is well known that they, from time immemorial, have made large quantities of sugar from these plants, but we, in this country have

made but little, and that is the exception and not the rule.

"The Sorgo is a Southern plant, and after nature has ripened the top seed, she then prepares nutriment for the side sets of seed that come out late. She first prepares gum, which is gradually changed to sugar, thence to be formed into starch in the seed. Now at this stage we use it having lost more than one-half of the best sugar in ripening the top seed. We press out the gum and sugar together—the immature juice—and wonder why we can not make sugar. The case is clear enough. The gum would in time be turned to sugar, but as it is, it spoils the sugar that is in the stalk.

"Can not every one see, that if we prevent the Sorgo or Imphee from going to seed, we shall compel nature to retain the sugar in the stalk, and also the juices will be mature, if we do not leave it too long, and thus we shall be rid of most of the gum. It will then be easy to make sugar, and I think nearly double the amount that we now do. In this I estimate a gallou of molasses as near ten pounds of sugar. Thus the average of Sorgo molasses being near 150 gallons per acre, is near the same as 1,500 pounds of sugar.

"I wrote this for the purpose of inducing cultivators to try the experiment with a portion of their crop, carefully noticing the difference between that deprived of its seeds and that which is not. I would recommended cutting off nearly all the seed just after tasseling out, leaving a few sprigs to show when the stalk is sufficiently mature."

A GOOD SMOKE-HOUSE.

We lately observed a well-planned smokehouse on the premises of a good farmer, worthy of a brief description. It was about six feet square, the lower half built of brick, furnished with an iron lined door and serving as an ash house and place for the fire.—The upper part, about four feet high, besides the ascent of the roof, was made of wood. It was separated from the lower part by scantling joists, a space of two or three inches between them, through which smoke and air could freely pass, but sufficient to catch any ham that might accidentally fall, and thus save it from the fire. The upper part, as well as the lower was entered by a door from the outside, this upper door may be kept locked, except when admitting or withdrawing hams; but the lower may be left unlocked, for the hired man to build fires, without any danger of the contents above being stolen, as the theif cannot pass through the openings between the joists.

Blackberry root tea is said to be a sure cure of diarrhea. This is simple and easy to obtain, and should not be forgotten.

The Hay Crop with a View to Harvest.

All Timothy needs all harvesting at one time; and this cannot be done. The first must be harvested greener, the last riper. Now, if there is a difference between green hay and ripe hay, there must be a loss to the farmer to harvest in this way. So with clover; so with grain. What then are we to do? We answer, what is done with the different grains. Have your grass mature at different periods, as barley may be harvested sooner than oats and oats sooner than buckwheat. This timing the the grains, is one of the cares of the farmer; you don't see his harvest all fall upon him at once. It is needless to say how he suffers in such case—what grain he loses—how his straw deteriorates—what anguish and toil he endures! A little thinking will prevent all this.

But how much more important is it to apply the principle to hay! a crop that is so extensive as a single crop of the farm. Here is the great difficulty: we lose by getting our hay too ripe towards the close of haying. Now, it is easy to remedy this, as to avoid it in grain. Use the different grasses and clover—especially the earlier and later. We need not instance the particular kinds, as these vary in profit and other advantages in the different localities.—The early and late clovers alone, give a great advantage in harvesting. Sometimes only one is advisable to use. Then grass must go with it. Timothy is neither early nor late—rather late, however. The reader will bring to mind other and earlier grasses. In this way, every grass and clover can be harvested to the best advantage. In other words, the farmer can make his hay crop, though a mammoth one, virtually a small one, as small as is the amount of each grass. To be sure he has the same amount of hay—has several hay harvests. It is after all—and most beautifully!—a whole crop harvested, each in rotation, all green and fresh, the last as tender as the first.

This is one of the most important things in harvesting; but, like the great majority of farming, is neglected—in most cases is perhaps not thought of. The reader of this article, at least will not have this excuse.

Multiply the kinds of grasses, if grass you prefer to clover. We are glad to see an improvement in this respect. How many soils that we have would feed advantageously some new grass—a grass that is a great success in other places—but is unknown here, and, yet, may do equally well here.

We want nothing better for our own use than June clover and Timothy—the clover cut twice, thus giving us three hay harvests. We have the best of success in this way, especially with the clover. But all localities are not alike.

Reliance on one kind, where much hay is used, will not do. There must be breaks to give chance for maturing—for it is a delicate operation to harvest hay—nothing to harvest ripe, woody fibre, which is not hay, and is starving so much our cattle. Tender as grass is, must it be hay in the barn. The summer is transferred to winter.—*Val. Far.*

WINTER MULCH.

Snow is a good covering for fields. But sometimes it falls too heavy; and sometimes it lies too long. Snow is a protection to grass and grain.—This is readily seen where snow lies longest. As the drifts disappear in spring, so the green circle of grass appears. But the ground is left packed; and though the grass does well from the early start it gets, it does not so well as if the snow was less heavy.

Sometimes, however, there is a little snow during the season, and the ground is laid open to the blasts of winter. In such a case, there are still means provided—*provided* we use them. They are not done by winter's hands, but must be done by our hands. We have seen the evidence of this, more particularly the past spring, which leads us to the present remarks. Manure, applied in the fall, is a better mulch than snow—better, because it does not pack, but, on the other hand, mellows the soil, and prepares it further for a summer mulch. The manure is a protection against the severity of the frost and the severe winds, with their lifting tendency. Then there is the virtue of the manure, which, in itself, is a counteracting influence against the cold. The ingredients of manure will not freeze as readily as water. This is an important point, we believe, too much overlooked.

Then there is another mulch for winter—grass.—This, we are glad to see, is getting to be understood. Farmers, without being told so, have learned this, many without knowing the cause of the benefit.—It is because it is a protection, and answers much as manure does, for that is what it is in the end. The tender grass is protected by itself. The soil is enriched and protected.

"But, manure, if you apply that, will escape—that is, the strength, during winter. The rains of spring and autumn will surely do that. My learned friends tell me so, and it looks reasonable."

So it does—or, at least, so it has. But this is a fallacy. The thing has been sufficiently tried to prove it. It has been tried by the scientific and unscientific; very few intelligent men object to top-dressing with manure. Even where the manure is to be plowed in, it is best to leave it spread on the ground awhile—several weeks at least, and let the sun and rain have their effect. As the gases are let loose, the earth attracts them, being in contact with them. But this is necessary—that the manure be spread evenly and finely, so as to get *close to the earth*, else it is of little benefit. This is common experience. And because the latter mode of top-dressing is not always successful, the farmer is discouraged. Let him apply his manure when the strength is yet in it, and mould it, so to speak, to the earth, and he has a covering, just what is wanted, for winter, and summer too; and the rain and sun but help to make the coat more successful.

Apply, then, early in the fall, any and all kinds of manure, even if raw and undecomposed. Take pains and spread finely, so that the coat becomes, as it were, part of the soil, so close to it, and all the strength will surely go into the soil, and get up a growth—an additional mulch of grass or grain for winter.—*Valley Farmer.*

How to Make a Barnyard.

The best way in my opinion, to form a barnyard for the preservation of manure, without its becoming muddy, where the ground is higher than some of its surrounding parts, is to plow and scrape from the centre to the outside, making a gradual descent from the outside to the centre. Let the fall be one-half foot in ten, and falling a little more as you near the centre. Dig a drain from the centre to some suitable place without the yard, where you can construct a vat to put in leaves, sods, muck, etc., that will absorb and retain the liquor from the yard.—The bottom and sides may be formed of plank, or may be more substantially built of stone and mortar. The top of the vat should be made so as to guard against rains and surface water as much as possible. The drain should fall considerably, and should be made of plank eight inches high and one foot wide inside. The head of the drain should be covered over with a good strong iron grade. The yard ought to be well paved with cobble stone, and with a little pains you can always have a dry yard. The water from the barn and sheds should never be allowed to run into the yard, but should be carried by good eave troughs to a large cistern for the purpose of watering stock.—*Working Farmer.*

Origin of Boots and Shoes.—Boots are said to have been invented by the Carrans. They were at first made of leather, afterwards of brass and iron, and were proof against both cut and thrust. It was from this that Homer called the Greeks brazen footed. Formerly, in France, a great foot was much esteemed, and the length of a shoe in the fourteenth century was a mark of distinction. The shoes of a prince were two feet; those of a knight, eighteen inches long.

MARL AS A FERTILIZER.

There is an old axiom in natural philosophy, that "nature abhors a vacuum." This is also often the case in a geological point of view. We frequently see large tracts of land so rough and barren that they would not pay to cultivate at a gift, yet a few feet below the surface lies, (as if by a wise provision of nature,) the hidden treasure, awaiting the advance of civilization and science to unfold them for the benefit of man. Such are the coal and oil fields of Pennsylvania and the marl beds of New Jersey.

There are very few Pennsylvania farmers who have an idea of the importance of this New Jersey fertilizer, which abounds especially in West Jersey, in the counties of Gloucester, Salem, Camden, &c. Marl is so far a grand desideratum, that its effects as a fertillizer upon light, sandy soils having caused a complete revolution in the price of land and the profits of farming in various portions of Jersey.—Twenty-five years ago land that could be purchased for $10 an acre, cannot be had now for $150. I have seen marl tried, however, on the heavy soils in Pennsylvania, with no visible improvement; but on light soils its effect on grass, rye, potatoes, buckwheat and truck generally, is like magic. Farmers haul it from five to fifteen miles in Jersey; and a provision is made in letting a farm, that a given number of loads of marl must be put on during the term of the lease.

There is one peculiarity in this fertilizer, which is that when it is put on a barren spot of land, the white clover will spring up where no signs of vegetation were ever visible before. A very respectable member of the Society of Friends used to say that he could see the grass seeds in the marl.

Marl, or green sand, is generally found on the banks of creeks and small streams flowing into the land; as there is a difference in the quality of almost every deposite, yet I believe the presence of phosphates, iron pyrites, potash, clay, &c., are the principles of its fertilizing power. Any individual that would like to see the effects of marl, let him take a trip to Woodstown, Mullica Hill, or Alwarstown, all pleasant little Quaker villages in West-Jersey, and talk with the farmers there, as well as see the manner of digging and applying it to their crops, &c.

The land owner that has a marl bed in West-Jersey, of good quality, his fortune is made. It sells at from $10 to $15 per square rood, and is uncovered and dug generally by poor working men in the neighbourhood.—*Cor. Ger. Tel.*

Base all your actions upon a principle of right; preserve your integrity of character, and in doing this never reckon on the cost.

How to Raise Osage Orange Hedge from Native Seed.

My experience has proved that Illinois has within her borders all that is necessary to make her independent of Texas for her own supply of Osage Orange seed. I have now growing as fine hedge plants as you will often see, from seed raised on an adjoining farm, at the rate of 10,000 to the bushel of oranges.

My mode of saving the seed is as follows: Gather the oranges as soon as hard frosts come, put them in the cellar, and let the seed remain in the orange until the 15th or 20th of April; by this time many will be rotten, which separate from the sound, put in a tight barrel, pound lightly until the pulp is made fine, then put in water sufficient to soak thoroughly for a few days, stirring several times a day. When the pulp is well softened, wash out as apple seed, and when washed out, put in process of sprouting without drying. Then bruise the sound oranges, which will cause them to rot, and proceed as before. I think it best to keep them from freezing as the seed is not fully matured at gathering; but there is nutrition enough in the pulp of the orange to perfect the seed, if you will assist nature by keeping them from freezing.—F. M. McCutchen, *in Canton Register.*

A Few Things to be Done.

Secure a quantity of fallen forest leaves. They make excellent bedding for horses and cows, litter for pigs, and a quantity should also be strewn upon the floor of the hen house. Nothing is better for fowls to scratch and recline in during the winter months.

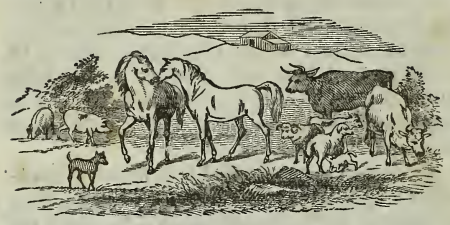
Tie up currant bushes to prevent the snow from breaking them down, and protect all vines and tender plants by laying them down and covering them with straw, brush, &c.

Cut up for fuel, down and decaying trees in your wood-lot, that it may be ready to haul to your door by the first snows.

Employ the winter evenings in reading, social intercourse among your neighbors and in jotting down for our columns such items of your experience during the past year as will interest our readers. Subscribe for and read one or two good agricultural journals.—*Farmer.*

A scientific Russian has discovered a process by which timber, though newly felled, may become so hard as to resist the influences of the most trying climate for an almost indefinite period. The most curious part of the invention is that it does not involve the use of chemicals of any sort, such as steeping in kreosote, etc., and that the process is applied to the tree while growing.

Live Stock Register.



Summary of Discussions on Cutting and Steaming Food for Stock.

1. The cutting of hay, straw or other fodder for domesticated animals, tends to an economy of food, and also to a saving of power in the animals fed; but this and all subsequent operations should never be carried so far as to induce either the bolting of food or the lessening of the flow of saliva in the process of chewing, or in ruminant animals to supersede the functions of the third and fourth stomach.

2. The absolute necessity for any manipulation offered us, as is contemplated in this discussion, depends upon the unsold supply of such food, and the number of animals kept on any farm. If, as on most farms, where tilth is and ought to be improved, there is a demand for large manurial resources, the mechanical process of cutting up such food to about inch lengths should be tried, and may be made more favorably conducted by the aid of horse or other power, at such times as are unsuited to outdoor work. Convenient arrangements should be provided for the storing of large masses thus cut, and for their handling with but little extra labor.

3. When thus cut, such amount as is needed for one feeding, should be wet with water at the rate of from 12 to 16 gallons to 50 bushels, and thoroughly incorporated; bran or other fine ground grain to be added, if allowed, and the whole to remain for 8 or 10 hours in a box, or covered in the coldest weather, so as to induce a heat sufficient to break up the minute cells of the food. If roots, fine cut, or pulped are added to the mass, less water may be used, and the heating process allowed to proceed until a slight acid re-action may be observed.

4. If steam is resorted to to quicken the heating process, the following rules may be observed:

a. It should never be applied to a mass of cut food, unless it has been first moistened as above, as there is reasonable ground to regard the effect of high heat, on the cells, as destructive, and inducing a slow combustion. The presence of a large share of finely cut roots, &c., might obviate this result.

b. The mass should never be fed at a higher temperature than blood heat, and may be reduced as low as 72° Fahr., in order to prevent the loss of teeth as a swill feeding, and injury to the lungs from the undue heating of the atmosphere of the stable, and perhaps to the stomach, from any subsequent use of ice-cold water.

c. Where musty fodder is used, careful observation should be had to ascertain whether the process of fermentation, which imparts to it its peculiar odor, has extended beyond the outer tissue of fodder; if it has, the farmer might as well cut up and steam shavings, as there is nothing left in such material but woody fibre, unless the microscope reveals the existence of fungus.

5. The flabbiness of flesh that has been observed in England in some experiments of cutting and steaming, proves nothing against the judicious conduct of these operations, but merely this—that unless the physiological laws hinted at in the first section have been transgressed, instead of good and sufficient food, the animals fed have either been stinted in their supply, or have taken in their stomachs mostly woody fibre, either of straw overdried before reaping, or of fodder which has been deprived of its elements of nutrition, as above indicated, and has been compelled to absorb his previous store of fat to support respiration, or of muscle to supply the waste of his tissues.

6. The true uses of winter feeding are to be reached by approaching as near as may to the economy of nature, in her supply of food on good pastures, both as to the temperature and richness of food given in cold weather, and its supply of water, and hence cold and dried food are to be changed into such warm and succulent food as nature furnishes, and only to these.

7. The experiments cited in this discussion are far from discouraging the practices referred to of cutting, moistening, or even of steaming food, but have not been conducted with such a careful method of weighing food, of ascertaining increased products of milk or flesh in cattle, or greater working power in horses, or furnished any proof of such results by by tabular statistics, as would warrant the Society in recommending the universal extensions of the methods pursued.

8. The subject is remanded to the Executive Committee, with the request, that in their discretion, it may either be made the subject of another discussion or of prize essays to be prepared in accordance with the outline method above suggested, or such other as may be in its judgement most expedient.—*A. B. Conger, Presideut, N. Y. State Ag'l Society at the Fair of* 1864.

Never allow the surface of the soil in a pot or in the ground to be long without stirring, unless it be naturally very open, as is the case with peat earth.

GIVE YOUR HORSES LIGHT AND AIR.

Under this head a correspondent of the Farmer and Gardener gives some advice on the ventilation of stables, which every owner of a horse should read and profit by. We have never seen the subject more forcibly presented :

History informs us that a certain emperor loved a favorite horse so much that he had a golden manger made for him. This extravagance appears unpardonable in the estimation of many, now a days, and yet it is more pardonable than the opposite extreme —meanness in the treatment of the horse. In looking at the construction of a very large proportion of our horse stables, I am sometimes led to think that the object of the builder must have been to see how widely he could depart from every principle of humanity and expediency—humanity in compelling a patient and faithful animal to remain penned up in a close, dark and filthy apartment—expediency in thus sacrificing not only the comfort, but the health, and consequently the usefulness and value of the animal.

Light is indispensable to the plant and to the man, it is no less so to the horse. If it is, why ?— When the tyrants of the old countries sought to inflict their most fearful punishment, next to death, confinement in a dark cell was considered the most severe. It is reasonable that the horse—whose native home is in the desert and wilderness, where there is nothing to obstruct the free light of heaven —is it reasonable, I ask, that he should not suffer from confinement in our generally dark and gloomy stables? Is it not a shame, in a land like ours, where glass enough for a moderate sized window can be had for fifty cents, that a valuable horse should be shut up day by day in a dark stall or stable? Let every horse owner's heart, if he has one, answer !

Is foul air wholesome for plants? Certainly not. Is it wholesome for man? Most emphatically, no ! If not wholesome for plants or men, can it be for horses? The answer is emphatically, *no !*

Why, then, are the majority of our stables constructed without the slightest regard to that most important feature, ventilation? In thousands of cases, an animal, than which none other loves the fresh air better, is doomed to confinement for days and nights at a time, in a stable, the atmosphere of which is so foul that a man would die in it. How many of the diseases to which our horses are subject, may be traced to this unpardonable error. I say unpardonable, for no man possessed of either common sense or humanity, would thus punish one of his best and most faithful friends—the horse.

A word in conclusion. Farmers ! if you would have healthy, lively, serviceable horses, give them plenty of light. God will supply it, if you will only furnish the means whereby it can be made to reach your stables.

Look to the ventilation of your stables, if you would not have prematurely old and worn out horses. Depend upon it, plenty of light and plenty of fresh air in your stables will save you many a dollar in the course of a lifetime.

Wintering Sheep on Hay—Feeding Grain.

I endeavor to have a good supply of hay and grass, as the stock-breeder should look well to this: herein is the great art of keeping stock in good condition. My stock range over the fields until the snow compels me to remove them into their stables where they are then usually closely confined, often only let out for exercise and being watered ; hay is given them in the morning, commencing shortly after sunrise, again in the evening, say from four to five o'clock.

The reader will ask—can sheep be wintered on hay ? I reply yes, the Spanish Merino requires no grain unless owing to occassional unavoidable circumstances, such as sheep being thin in flesh when taken up, hay being damaged by wet weather in harvest, &c. When the breeder cannot winter his sheep on hay alone, he had better try and procure a different flock or a different feeder, for the fault is with one or the other unless his hay is damaged.— Favorite old ewes retained in flock and late, thin lambs, should have a little grain and oil-meal. The main flock should go through the winter on hay alone, and when spring admonishes you to turn to pasture, the sheep should be in good condition, for if low in flesh when first taken up, they have ample time to recruit.

I will now say to your correspondent "Young Farmer," of Guernsey Co., that he can easily put his grain in the trough without spilling any of the grain before getting it divided, by first passing along, and with his hand removing the few orts from the trough, and then take his grain and strew it quickly along the trough, allowing his dog to precede him, which will cause the sheep not to interrupt him in any way. As to feeding straw and grain, I consider hay much more economical than straw or grain, or grain and sawdust. I have never yet been able to see the advantage of feeding straw.

My sheep barns are divided in different apartments, each stable has a trough on each side eight inches from the siding, with a board twelve inches wide sloping up to siding, with rungs twenty-four inches long inserted in a sloping position and capped with pine scantling sixteen inches from the siding, so that the sheep cannot let their droppings fall into the trough, whilst the rack and trough can be filled at the same time and avoid trouble of feeding in a storm or having anything snowed under; this trough also serves to catch the seeds, &c. falling from the rack.—J. S. Goe, *in Ohio Farmer.*

CATTLE CHEWING THE CUD.

BY GEO. H. DADD, V. S.

The ox, a member of the group *Ruminantia*, has four compartments in the stomach, yet two of them are nothing more than dilitations of the œsophagus.

The food having been gathered by the lips, tongue and teeth within the mouth, it undergoes a grinding process between the molars, and receives the admixture of salivial fluids secreted by the submaxillary, parotid, thryoid and sublingual glands; it then passes down the œsophagus into the paunch; the character of the food, however, regulates its passage into the various compartments; if the pellet of food be solid, the paunch receives it; if it be semi-fluids, it goes beyond the paunch to the second and perhaps third compartment. This is the case with a sucking calf; the milk which forms its nutriment required no re-mastication, and therefore passes directly into the true digestive cavity—the fourth compartment.

It appears, therefore, that the functions of digestion and re-mastication are involuntary, and are governed by the same sort of power which causes the heart to pulsate, expands the lungs, secretes the bile, pancreated juice, etc., without the aid or consent of the animal. We may, however, to a certain extent, increase or decrease these functions by artificial means; but their primary operations are uncontrollable, simply because they are involuntary. Some persons have doubted the fact of rumination, and if any of my readers be skeptical on the subject, let them satisfy themselves by experiment.—The best subjects for demonstrating the acts of rumination, are animals with lean necks. For example, let a person stand on the left side of the animal, in the region of the neck, (supposing the latter to be in the *ruminating mood.*) He perceives the cud re-ascend through the gullet, and re-descend again into the stomach. At the period of re-ascension, place the ear in the region of the gullet, and a gurgling sound will be heard, different from that accompanying re-descension. The action has been described as undulating, alternate, coming and going, like the motion of a ship; but this is regulated by the respiratory movements and different attitudes of the body. We can, however, at the moment of re-ascent, perceive a flank movement, deep inspiration, succeeded by a rapid expiration, showing conclusively that a powerful nervous concurrent force—involuntary—controls the action of rumination.

Finally, the cud can be made to ascend or descend in the following manner:—We perceive the cud descend; now grasp the gullet firmly, and it re-ascends into the mouth. We next perceive the cud ascending; arrest it by compressing the gullet, and it rapidly descends again into the stomach; hence the phenomenon of re-mastication can readily be demonstrated.

The solld food, when once in the paunch, receives the admixture of fluid secreted from its walls; after maceration for a short time, the more solid parts return to the mouth, where they undergo another mastication, and are again saturated with the salivial fluids and swallowed; if properly masticated it reaches the third stomach—manyplus or omasum—here it nndergoes a further reduction, becomes quite pulpy, after which it enters the fourth stomach.

Carpenter thus describes the phenomena of rumination: "The direction of the food into one or the other of the digestive cavities, appears to be effected without any voluntary effort on the part of the animal itself, but to result simply from the very peculiar endowments of the lower part of the œsophagus. This does not entirely terminate at its opening into the first stomach or paunch, but it is continued onwards as a deep groove with two lips; by the closure of these lips it is made to form a tube, which serves to convey the food onward into the third stomach; but when they separate the food is allowed to pass either into the first or second stomach.

When the food is first swallowed, it has undergone but very little mastication; it is consequently firm in consistence, and is brought down to the termination of the œsophagus in dry bulky masses; these separate the lips of the groove or demi-canal, and pass into the first and second stomachs. After they have been macerated in the fluids of these cavities, they are returned to the mouth by a reverse peristaltic action of the œsophagus; this return takes place in a very regular manner, the food being shaped into globular pellets by compression within a sort of mould formed by the ends of the demi-canal, drawn together, and these being conveyed to the mouth at regular intervals, apparently by a rhythmical movement of the œsophagus. After its second mastication, it is again swallowed in a pulpy semi-fluid state; it now passes along the groove which forms the continuance of the œsophagus, without opening its lips; and thus conveyed into the third stomach, whence it passes to the fourth."

A good, soft, dry bed, is an important item toward the thrift of animals. It assists them in keeping warm, and in this it saves food; it inclines to rest and quietude, and in this it aids the action of secretory glands.

OATS AS FOOD.—Oats are cooling to horses, and hence good for summer. Oats are also a valuable article for the table—used extensively among the hardy Scotch, and may be made a substitute for more expensive grains. The oat makes white, nutritious bread.

USEFUL RECIPES.

ITCH OINTMENT.—Take of lard and suet, each 1lb., melt and add Sugar of Lead, 6 oz.; Flour of Sulphur, 2 oz.; can be scented with essence or oil of Bergamot.

ANOTHER.—Take of White Precipitate, 1 drachm; Venice Turpentine, 2 drachms; Lard, 10 drachms—Rub well together.

GAPES IN CHICKENS may be easily cured by giving them small crumbs of dough impregnated with a little soft soap—once or twice is sufficient.

CURE FOR BOTS.—Give the horse ¾ of an ounce of slaked lime in his food, 3 times a week, for 2 or 3 weeks—said to be certain.

TO PREVENT MURRAIN IN CATTLE. — Take equal parts of salt and slaked lime; mix, and give 2 table spoonsful twice a week during the prevalence of the disease.

TO INCREASE THE SHARPNESS ARD STRENGTH OF VINEGAR.—Boil 2 quarts of good vinegar till reduced to one; then put in a vessel and set in the sun for a week. Mix this with six times its quantity of bad vinegar in a small cask; it will not only mend it, but make it strong and agreeable.

TO PREVENT IRON FROM RUSTING.—Warm the iron till you cannot bear your hand on it without burning yourself. Then rub it with new and clean wax, white preferred. Put it again to the fire till it has soaked in the wax. When done, rub it over with a piece of serge. This will prevent iron from rusting afterwards.

BLACKING.—Put 1 gallon of vinegar into a stone jug; add 1 lb. of ivory black well pulverized; ½ lb. loaf sugar; ½ oz. oil vitriol, and 1 oz. sweet oil; incorporate the whole by stirring. This is a blacking of great repute.

ACORN COFFEE.—Take sound ripe acorns, peel them, and roast them with a little fat; then, when cold, grind them with one-third their weight of real coffee. This is held in high repute by German physicians and farmers.

[The above recipes were furnished us by W. W. C. one of our readers, whose profession should enable him to judge of their efficacy.]

CURE FOR CORNS IN HORSES' FEET.—Pare down the hoof carefully, cutting out as much of the corn as possible without making it bleed. Then put on some muriatic acid, and the cure will be effectual.

LAMBS.—It is necessary for wool growers to know how to manage lambs, when ewes having lambs are weak. The best plan is to dig a hole in moist manure, and put the lamb in, cover it up all but the head, and leave it in that situation for half an hour, when the lamb will be able to run after the rest of the flock. I have never known this remedy to fail. —*J. H. A. in Rural American.*

The Florist.

Rules Relating to Hyacinths Grown in Glasses.

These rules may be learnt in five minutes, and if followed, will, I am persuaded, be attended with satisfactory results.

1. If you choose your own bulbs, look for weight as well as size; be sure also that the base of the bulb is sound.

2. Use the single kinds only, because they are earlier, hardier, and generally preferable for glasses.

3. Set the bulb in the glass so that the lower end is almost, but not quite, in contact with the water.

4. Use rain or pond-water.

5. Do not change the water, but keep a small lump of charcoal at the bottom of the glass.

6. Fill up the glasses with water as the level sinks by the feeding of the roots, and by evaporation.

7. When the bulb is placed, put the glass in a cool, dark cupboard, or in any place where light is excluded, there to remain for about six weeks: the roots feed more freely in the dark.

8. When the roots are freely developed, and the flower-spikes is pushing into life (which will be in about six weeks), remove by degrees to full light and air.

9. The more light and air given from the time the flowers show color, the shorter will be the leaves and spike, and the brighter the colors of the flowers. —*Paul's Lecture on the Hyacinth.*

The Cultivation of Flowers.

Thousands of acres of soil are annually planted with flowers in France and Italy, for making perfume alone. A single grower in Southern France sells annually 60,000 pounds of rose flowers, 30,000 pounds each of jasmine and tuberose, 40,000 pounds of violet blossoms, besides thousands of pounds of mint, thyme, rosemary, etc., and he is but one of thousands engaged in this branch of horticulture.—The atmosphere of some of these towns is so filled with fragrance that a person is made aware of his approach to them by the odors which greet him miles away. Already in America, hundreds of acres of peppermint and lavender are being planted, and the product exported to Europe. Though the Old World bears the palm in the perfumery line, and London and Paris, with their Covent Gardens and Marche-aux-Fleurs lead New York in window gardening, and the cultivation of flowers in pots generally; yet New York carries on a larger trade in cut flowers than either of the cities named, or any other in the world. One New York dealer has sold, since last September, 50,000 carnation blossoms, 30,000 bouvardias, 70,000 Chinese primroses, 30,000 tuberoses, besides over 10,000 rose camelias, heliotropes, etc., and he is but one of a large number engaged in this business.

THE
MARYLAND FARMER & MECHANIC,
AT $1.50 PER ANNUM,
PUBLISHED ON THE 1st OF EACH MONTH,
BY
S. S. MILLS & CO.
No. 24 South Calvert Street,
CORNER OF MERCER,
BALTIMORE.

S. SANDS MILLS, E. WHITMAN, } PUBLISHERS AND PROPRIETORS.

BALTIMORE, DECEMBER 1, 1864.

TERMS OF SUBSCRIPTION:

$1.50 per annum, in advance.
6 copies for $7.50——10 copies for $12.50.

TERMS OF ADVERTISING:

For 1 square of 10 lines, or less, $1 for each insertion.

1 page for 12 months				$100 00
1	"	6	"	60 00
½	"	12	"	60 00
½	"	6	"	35 00
1 page Single insertion,				15 00

and $10 for each subsequent insertion, not exceeding five. Cards from 10 to 12 lines, yearly, $10—half yearly, $6.

Collections on yearly advertisements made quarterly in advance.

RENEWALS.

The subscription time of a large number of our readers expires with the present number of the FARMER. Money sent in any time previous to the first day of January will be properly credited and subscriptions extended in accordance therewith.

New Year's Present.

The MARYLAND FARMER for 1865 would prove a very acceptable present to any one engaged in agriculture. Those who desire to make a New Year's Present could not do better than subscribe for their rural friends for one year—mailing from this office.

Support your Own Paper.

Farmers of Maryland should take a pride in giving a hearty support to the only Agricultural Journal in their State. The "MARYLAND FARMER" commences its Second Volume in January next, when every farmer in the State should be enrolled on our books—and can be, by sending us $1.50—thereby securing a book of 348 large octavo pages treating on every subject interesting to the agriculturist.

THE CROPS FOR THE YEAR 1864.

The final report (September and October) of the crops of the present year has just been made by the Agricultural Department at Washington. The returns are now full, and what was hitherto but estimates assume the character of ascertained quantities. The wheat crop amounts to 160,695,823 bushels. It takes about five bushels of wheat to make a barrel of flour, which would make the production equal to thirty-three millions and a half barrels, or more than one and a half barrels to every one of the population of twenty millions whose industry produced it. The production of wheat is only about nine millions less than in 1863, which was considered an excellent crop. The rye production was 19,872,957 bushels, or less than one million short of the production of the previous year. Barley 10,716,328, about the same decrease as rye in the year's production. Oats 176,690,064 bushels, an increase of six millions over the previous year.—Hay 18,116,751 tons, or about a million and a half tons less than in 1863. Corn 530,561,403 bushels, or about seventy-eight millions increase over the year preceding. Buckwheat 18,700,540 bnshels, an increase of nearly three millions. Potatoes 96,256,-888, a decrease of four millions.

Taking the yearly production, therefore, the balance is in favor of 1864, and the quality is much better. If the currency and taxes did not affect prices, all the leading articles of provisions which form the support of life would be less in price.—The sorghum, another valuable crop, shows a large increase. In the production of animal food there is, however, a material falling off in nearly all the States. The production of flaxseed shows a very large increase, New Jersey and Pennsylvania taking the lead in this increase; in the first amounting to over fourteen per cent., and in Pennsylvania four per cent. Ten of the loyal States produce cotton. The falling off in tobacco is set down at sixty-seven millions of pounds. Balancing all the increase and decrease of vegetable and animal production, and there is shown to be abundance of food for the population. The surprising part of it is that the production should be so large with so many engaged in war, and so much destruction of animal life for war purposes. The use of machinery in farming has made up for the absence of hands. Hereafter, when peace is re-established, its good effects will be felt in highly increased crops.

JOB PRINTING.

If our friends, either in the city or country, are in want of Printing, we respectfully ask a call at our office, No. 24 S. Calvert street, where we are prepared to execute all descriptions in good style and at market prices.

FREE LABOR IN MARYLAND.

The following remarks upon the subject of free labor, we extract from the Baltimore *Sunday Telegram* of Nov. 20th :

"The subject of free labor in Maryland is exciting considerable attention just now, especially in the agricultural districts, in view of the fact that the relation of master and slave, which had been in existence ever since the settlement of the State, was set aside by the adoption of the new constitution. The question is one of great importance, as upon its settlement to the mutual satisfaction of both parties immediately concerned, may depend much of the future welfare of the State. There can be no doubt that the sudden emancipation of so large a body of slaves, who have been accustomed all their lives to look upon their late masters as in some sort their protectors and their guides, will have a bad effect upon the agricultural interests of the State, unless some conciliatory agreement be entered into, by which this large amount of labor can be continued, with, of course, a change in the condition of the parties to it. This can only be done by the establishment of some fair and equitable system of wages, by which the negroes may receive a sufficient compensation for their labor, or, failing in this, the substitution of white labor. This latter course, however, it might be difficult at the present time to pursue, from the fact that this description of labor is somewhat scarce, by reason of the large number of able bodied men in the army, and the demand that exists for them in the fields of labor in other States. The planters and farmers in some parts of the State have already had the subject under consideration, and have adopted such a scale of wages for both men and women as they deem reasonable.—They have also resolved that they will make no contracts for a less term than a year, because, to do otherwise, would subject them to great loss and inconvenience at a time when labor was most needed. This cannot be viewed in any other light than as a just measure of self-protection, and surely no one could object to it; for, with the well known thriftless and changing habits of the negro, no reliance could be placed upon him unless he was bound by some strong incentive to fulfil his part of the contract. In regard to the wages, the farmers and planters are themselves the best able to judge what rates they can afford to pay, and they will doubtless, in order that their interests may not suffer, be willing to allow a fair remuneration. In any light in which we may view the matter, it will be attended with a good deal of difficulty, because of the change in the condition of things from an old to a new system of labor, and one in which we have yet had no experience. Whatever result may be arrived at, we hope it may be done calmly and dispassionately, so that the consequences of this change, if attended with inconvenience as it must necessarily be, may be rendered as light as possible to those who have such important and vital interests at stake."

WESTERN MARYLAND RAILROAD.

The following we copy from the Baltimore County Advocate, and would commend the road to the consideration of farmers and capitalists of that region of country:

Efforts are being made to extend this road to Hagerstown, and they will probably be successful; at any rate, should we have peace, it will not be long before the extension is made.

But the road, as it now exists, from Baltimore to Union Bridge, in Carroll county, is through a region unsurpassed in the State for agricultural wealth, and during the winter, the amount of freight offered severely taxes the capacity of the stock of the road. In addition to this vast amount of agricultural wealth, through the rich limestone valleys, there is much mineral wealth. In Green Spring Valley are rich deposits of iron ore. Near Reistertown, chrome of the best quality is found in vast quantities. At Finksburg, are the famous copper mines, which have been worked for years, but now with railroad facilities, are being extended into the bowels of the earth, and new machinery is about being introduced. In the neighborhood of Westminster there are inexhaustible beds of the best iron ore. Beyond Westminster, we come into the limestone region, which, when land-owners begin to understand the true value of lime as a fertilizer, will yield a large revenue to the road. The limestone is of the very best quality, and is procured with ease, right along the road.—The rock through this region, from Westminster to Union Bridge, is blue slate, with here and there a white variagated solid close grained limestone forced up through it, some places, the rock lying in close proximity. At one point, during a recent visit to that region, we found a deposit of this limestone of remarkable fineness and purity, in a cut made for the road. The quarry is not yet opened sufficiently to procure large blocks, but the stone very much resembles the fine grained marbles of the North River and Vermont, variagated with a beautiful red streak, and is doubtless susceptible of a high polish. We doubt whether the gentleman who owns this land, knows of the vast wealth of marble that lies underneath his fertile fields.

Thus railroads bring to light the hidden wealth of the earth, stimulate manufactures, and develop the agriculture of a region.

The late annual report of this road shows that it has become quite remunerative to its stockholders, and the business in transporting passengers and freight is rapidly increasing.

GOOD TOOLS.

In order that a farmer may be able to do his work well, it is necessary that he should have GOOD TOOLS AND IMPLEMENTS, and also that those tools and implements be kept in *good order;* yet how often is it the case that farmers instead of paying the necessary attention to their tools, neglect them altogether, even suffering them to remain for a long time exposed to the weather in the place where they were last used.

I have no doubt that the reason of this often is, that farmers in buying their tools, purchase those which can be obtained at the lowest price, and consequently underrate the importance of bestowing that attention upon them which is necessary, in order that they may do their work properly. And here let me say a few words upon the bad economy of buying low priced tools, for they are not by any means cheaper, but generally prove dearer than those which cost double or even treble their price.

It is obvious to all that it is necessary to bestow a great deal more care and trouble upon an implement of an inferior quality, to enable it to do the same amount of work in as good a manner as one of a better class, than upon one of a superior quality. Hence the value of the time lost in repairing such an implement would soon amount to more than the difference of the cost of such a one and one of a better class.

Now, I believe if farmers, instead of buying these low-priced tools, would purchase only those which they have ascertained for a certainty to be good ones, we would not see near so many plows, harrows, &c., lying about the fields or stowed away in the fence corners; or hear so many complaints about the smaller tools being lost; for when they purchased first-class tools, they would see that the necessary attention was bestowed upon them to keep them in good order, and the increased facility and dispatch with which their work was done would amply repay them for the extra amount invested.—*Cor. Ger. Tel.*

The Maryland School Journal.

This is the title of a neat monthly, published in Hagerstown, by J. P. HARMAN & Co., and devoted to the cause of Education, Literature, Morality, &c. Its columns are well stored with original and selected articles, that cannot fail to prove acceptable to the class of readers for which they are intended. The editors thus speak of the enterprise:—"It is our determination to make it one of the permanent institutions of the State, and we appeal to the teachers, school officers and friends of education throughout the State everywhere to sustain us." The *School Journal* is published monthly at $1.00 per annum. See advertisement.

Do You Take the Farmer?

Reader, are you a farmer? If you are—do you take the FARMER? If you do, all right—if you do not, let us ask who is the greater loser, you or the publishers of the FARMER? They lose a drop only of gain, by your subscription, you lose many times the cost, by the loss of information truly valuable to every farmer and stock-raiser in the land—the practical results of thousands of working men, all over the country. Therefore, we say again—who is the greatest loser? If you are wise, take the "FARMER."

ARRIVAL FROM KENT.—We cannot forbear making our acknowledgments to Philip Rasin, Esq., of Kent, for the *small cargo* of Roasters, Mercers, &c., which we received per steamer, and which were handled with much more freedom than an unexploded shell. PRICE'S Pippins, and JUSTIS' mammoth Pumpkins were also received—the latter rendered to pumpkin pies—and *not* served to the brindle cow. The apprehended indignation meeting on the part of the "divinity" that presides over our domestic destiny, we assure the gentlemen, were altogether groundless—as she received them with the greatest stoicism.

LARGE RADISH.—We received recently a huge radish weighing 2 pounds, and which, it is stated, was the *smallest* pulled from the bed this Fall. They were raised on "Mount Ida" Farm, near Laurel Factory, Howard county, by J. W. Willson, and we conceive deserving of notice.

Hygenic Importance of the Sewing Machine.

The *hygenic* importance of the Sewing Machine is not less than its commercial. The unhealthful nature of ordinary needlework is proverbial. The cramped position, the strain of the eyes, the derangement of the digestive organs, lungs and nerves, over a monotonous task, have told with fearful effects upon the health and character of woman, prior to the introduction of Wheeler and Wilson's Sewing Machine. "With fingers weary and worn; with eyelids heavy and red," she has toiled at her endless task until her brain grows dizzy, and her eyes swim. Her frequent long drawn breath, her palpitating heart and uneasy sensations speak plainly of respiration, digestion and circulation impeded, and muscles and nerves deranged. The best medical opinion is, that the exercise of the lower limbs in operating the machine is highly invigorating.—With it woman becomes as efficient a worker as man with any mechanical instrument. Her intellect is sharpened by contact with one of the most effective inventions of modern times, and the needlewoman now no longer a drudge, ranks with the artist, engineer, architect and master-builder.

Those who desire to avoid the various ills that "flesh is heir to," from hand sewing, are especially directed to W. Merrell, 217 W. Baltimore street, agent for Wheeler and Wilson's celebrated Sewing Machines, as well as a very accommodating gentleman, and obtain one of those useful as well as ornamental stitchers.

Gleanings from the Country Press.

A NEW ENTERPRIZE.—A company of gentlemen—says the *Hagerstown Mail*, of Nov. 11th—are about starting a new Bone Mill, and have with this intention leased for a term of years, the Mill and grounds of Mr. John H. Heyser near this place. The company comprise Dan'l Startzman, B. J. Byers, Daniel Huyett, Geo. Schindel, John Kendle, and Jacob Startzman. They design going to work at once, and at the earliest practicable moment the manufacturing of this important fertilizer will be commenced.

WE are pleased to know—says the *Worcester Shield*, of Oct. 29th—that Dr. Flemming has returned from Baltimore with a new Sorghum Evaporator, in place of the one destroyed by fire, and that he will have his Mill in operation again some time next week.

ACCIDENT AND LOSS OF LIFE.—The boiler of the Steam Grist Mill located at St. Michaels—says the *Easton Journal* of Nov. 1st—exploded on Tuesday last about 12 o'clock, destroying the mill-house and instantly killing two persons, one of whom was Mr. John H. Leonard, and the other the miller'a wife, a negro woman. Mr. Schaffer, the owner of the mill, received some severe injuries on his head.

SAD AFFAIR IN CHARLES COUNTY.—On Saturday last—says the *Prince Georgian* of Nov. 18th—the house of Mr. De Lozier, near Port Tobacco, took fire and was soon enveloped in flames. Mrs. De Lozier ran up stairs for something, and while up there the roof fell in. Her husband, supposing she was crushed to death, fell and died in few moments from fright. Mrs. De Lozier was rescued from her perilous position, but not until after her husband's death. The dwelling, furniture, and all the out-houses were burned to the ground.

COAL TRADE ON THE CHESAPEAKE AND OHIO CANAL.—For the week ending Tuesday 15th Nov., 95 boats have departed for Georgetown, carrying 10,040 tons of coal to market. For the season 2,050 boats have been manifested at the Collector's office, carrying 223,845,18 tons of coal.—*Cumberland Civilian and Telegraph.*

From the Marlborough Gazette of November 23d, we extract the following appeal, of a purely personal character:

"Persons indebted to this "institution" for subscription and advertising, are requested to make immediate settlement. We cannot publish a paper for nothing. To those who have promised us wood, potatoes, &c. we would respectfully say, now is the time to bring in your "truck." We will take any thing that we can eat, wear, or make use of in any way whatever. Now is the appointed time, so come along, don't be bashful.

Nota Bene.—Don't send any turnips. One of our most respected patrons has given us 25 bushels of this esculent.

PORK.—The *Kent News* says: But little pork has as yet been offered in this market. The high price of corn has caused the farmers to fattten an unusually small number of hogs this season, and the supply of pork over their immediate wants will be very limited. We have heard of engagements at $15 and $16 per 100 lbs., which we suppose will be the ruling prices.

SORGHUM.—We have been presented,—says the Ægis & Intelligencer of Belair—with a sample of this article by Mr. Joseph Wetherill, manufactured at his new mill, which is certainly the best that we have seen anywhere. The mill we are told, is one of the finest in the country, and certainly, if the sample presented to us is a fair specimen of its work, none who patronize it can be disappointed.

SALES OF PROPERTY.—Geo. Vickers, Esq., as Trustee, sold on Thursday last,—says the *Chestertown Transcript* of 26th Nov.—the farm known as "Hyrons Farm," containing 201 acres, to John C. Groome, Esq., of Elkton, for $89.11 per acre. The farm belonging to T. M. Blackiston, containing 125 acres, for $40 per acre.

FIRE.—On Thursday night last, about 3 o'clock,—says the same paper—the Steam Saw Mill belonging to Capt. B. S. Ford, in Queen Ann's Co., not far from Chester Bridge, was consumed by fire.

"NATIVE WINES!"—When we visit Wheeling, Cincinnati, and St. Louis—says the *West Virginia (Buckhannon) Republican*—we hear the people speak of their "native wines" in such tones as to make us feel ashamed of our little State. It is a healthy drink, and if more were used instead of the bad whisky that is consumed, people would be better. Has any citizen of Upshur county ever been heard to brag on the "native wines" of this section? No, never. And why? Because we have not that degree of energy in our midst that should characterize a great and prosperous country. Our climate and soil cannot be surpassed for the cultivation of the grape; yet, for the lack of energy, we have not a vineyard in the county. There is the tract of land known as "the island," valued at $1.50 per acre; put it in grapes, and in two years it will be worth $500 per acre; yet for the want of energy it lies almost idle. We have men with the capital; cannot their dormant energies be exhumed, so that Upshur county can boast of her "native wines?"

The same paper speaking of the Cultivation of Fruit, says:

Considering the climate and soil, we never saw a country so scare of *good fruit* as this county. Messrs. Teter, Dean and Lawson, are the only ones that we know of who cultivate the best qualities of the apple. We have seen some specimens from their orchards which would be creditable to the Genessee Valley, N.Y., the finest fruit country in the world. Some men tell us they cannot afford the expense! Let us look at it: Say that a man sells $100 worth of apples a year—which is a big estimate for our crab-apple orchards—if that same man will expend $25 in grafting good fruit into his orchard, in five years he can sell $500 worth of apples a year. Plums are a profitable kind of fruit, yet none are cultivated in this "garden spot" worthy of note. Strawberries? we have not seen one in the county larger than a pea, yet the climate and soil are the best in the world. Let some one begin the good work immediately.

[We would suggest to the editors of the Republican, that this state of things might be measurably improved by the introduction among the people of Upshur, of a first class Agricultural and Horticultural Magazine, such for instance as the MARYLAND FARMER, which can be furnished at $1.50 per year. We hereby authorize the Republican man to marshal every farmer in his county under our agricultural banner—believing it would be a potent agency in bringing about the desired improvement.]

DEMOREST'S MIRROR OF FASHIONS.—We have received the November number of this very excellent Monthly, and would recommend it to our lady readers as just the thing for them, as it contains copious Fashions, and directions for the making up of their dresses, &c. Besides the regular fashion plates, it has also a larger sheet with the patterns all sketched out, so that you cannot make any mistake in making up your wardrobe. It should be upon every lady's toilette. Address Mme. Demorest, 473 Broadway, N. Y.

Horticultural.

ORCHARD CULTIVATION.

The cultivation of orchards is one of those mooted questions which for a long period has disturbed the horticultural community, and yet there would appear to be but one rational side to the question; and that is all orchards should be tilled. It is simply nonsense to expect that a tree will produce and mature large quantities of fruit, for any considerable period, without manuring of some kind to replace the elements which the fruit carries away.—While the cultivation of an orchard may not prove remunerative, so far as the crop itself is concerned, it undoubtedly, if judiciously managed, improves the condition of the trees, and consequently the quantity and quality of the fruit. We have known orchards bear fruit well, which for many years were permitted to lie in grass, but eventually they gave out, and ceased to be productive. On the other hand, we know of orchards which for thirty years have been cultivated as regularly as other portions of the farm, and the results have been the continued health of the trees, and unless destroyed by frosts, a regular average annual yield. The stirring of the soil appeared to impart new energy to the trees. They not only presented a healthy and vigorous appearance, but yielded handsome returns yearly.—The crops, it is true, may not have been as luxuriant as on those parts of the farm not so much shaded, but every bushel of oats, corn, potatoes or turnips might properly be set down as so much clear gain. It is well to remember that deep plowing in an orchard is not advisable. A good evidence of the value of cultivation is shown by the fact, that when trees run to wood, and yield little or no fruit, the luxuriant growth of the wood can be readily checked, and fruitfulness promoted by putting the orchard in grass for a couple of years. If, at the end of that period, shallow plowing is resorted to, the beneficial effects will be apparent to the most casual observer.—*Culturist.*

Growing Upland Cranberries.

The grower of some fine cranberries grown on upland, furnishes the Maine Farmer a few ideas in relation to their cultivation:

It is the nature of the Cranberry, like all other plants, to grow to perfection somewhere, and as it happens, this somewhere is where the land is so sterile that nothing else can grow except moss. In proof of this, we find both the bog and mountain cranberries growing naturally on the mountain, in the lowest bogs, and in all localities, sometimes floating on the pond, always on poor soil, mixed with moss, protection for it both from summer heat and winter cold.

Cole, in his Fruit Book, says: "Where a gravelly knoll has been reduced for a road, we saw excellent cranberries of spontaneous production, on dry, hard and poor soil. On another spot, we saw fine fruit by the roadside, on a very poor, dry, hard soil."—He also adds, "with these cases of good crops under every disadvantage, it would be surprising if cranberries should not grow well on high land; but as for the culture, I would ask for nothing more than to remove the soil to the depth of one or two feet with a plow and scraper, and plant the same with vines and moss from the cranberry bog. This should be done in the fall or spring, and the tops mowed off the following summer, which will cause them to spread and cover the whole surface. By this experiment I have raised at the rate of 559 bushels an acre.

[We have frequently seen the attempt made in the Middle States to grow upland cranberries, but never we regret to say, with any success.—*Eds. Far.*]

Upland Cranberries.—At a late meeting of the Pomological Society, William Parry, of New Jersey, so widely known for his skill in raising small fruit, stated that although raising upland cranberries had succeeded in some instances, yet that the amount of labor required to keep them clear of weeds was so great, that if the same amount were expended on strawberries it would produce a far heavier return for the outlay. M. B. Bateman, of Ohio, said that among the many experiments that had been performed with them in Ohio, not one had really proved successful.

A Hint to Gardeners.—As our houses and gardens are always, more or less, infested with vermin, it is satisfactory to know that *benzine*, an article become sufficiently well known as a detergent, is no less efficacious as an agent in insecticide. One or two drops are sufficient to asphyxiate the most redoubtable insect pest, be it beetle, cockchafer, spider, slug, catapillar, or other creeping thing. Even rats and mice will speedly decamp from any place sprinkled with a few drops of the patent benzine.—A singular fact connected with this application of benzine is, that the bodies of insects killed by it become so rigid that their wings, legs, &c., will break rather than bend, if touched. Next day however, when the benziue has evaporated, suppleness is restored.—*London Chronicle.*

A French gardener finding a piece of woolen cloth, which the wind had lodged in a tree, covered with caterpillars, acted upon the idea suggested, and placed woolen rags in several trees. Every morning he found them covered with caterpillars, which were easily removed.

CULTURE OF LETTUCE.

Everybody, we believe, likes lettuce. It is considered healthful, has a slight narcotic influence on the system, and, perhaps, may be especially useful to such nervous temperaments as find it difficult to secure a *nap after dinner*.

It thrives best in a light, rich soil; a soil that is rich from prior cultivation, rather than from the immediate application of manure. If it be wanted quite early—and that seem desirable—the seeds must be sown in a hot bed in March, and transplanted in April, in a spot favorably protected from cold winds; and even here it may need occasional coveriug. It only requires proper cultivation after this to secure a crop. Allow sufficient room between the plants for them to head out without crowding each other, and an occasional evening watering if the weather be dry. Those who keep poultry will find it worth cultivation for their use. They are excessively fond of it. A dozen hens will eat two large heads each day if they can get them. The store pigs like it equally as well. We have been in the habit of growing it along the sides of the paths in the vegetable garden, and on any little vacant spots, where it appears well and gives us a cart load or two each summer for the pigs and the hens.

There are many varieties of lettuce, among which four excellent kinds are the Early White Butter or Cabbage, the Early Curled Silisia, Early Tennis Ball, or Rose, and the Imperial Head, or Sugar Loaf.—*Ex.*

What Pears Shall I Plant?

If a farmer were to say to us that he was about to plant twenty-five pear trees for profit—that is for market purposes—and that he desired a suggestion as to the varieties and number of each variety he should set out, we would have no hesitation in giving him the following list: Four Early Catharine, four Juliana, five Manning's Elizabeth, three Bartlett's, five Seckel, and four Potts. These ripen in the order they are placed.

It appears that these varieties do well everywhere, and are therefore particularly adapted to general cultivation. They are very productive, the trees hardy, and vigorous in their growth, and the fruit generally perfect. The Early Catharine and Seckel are not early bearers, but when they once commence they seldom fail in giving an abundant crop.

In purchasing the trees be careful to select good specimens; have them taken up with all the roots possible; transplant with every attention; stake firmly, placing the stakes at an angle, with the head to the north-east; keep the ground stirred two feet from the stem all round; and allow no cattle to disturb them.—*Ger. Tel.*

DOMESTIC RECIPES.

Gingerbread.—Stir together till quite light, a quarter of a pound of butter and the same of brown sugar. Then mix in half a pint of molasses. Sift in rather than less than a pint and a half of flour.—Beat four eggs very light, and stir them gradually into the mixture alternately with the sifted flour, a tablespoon of ginger and a teaspoon of cinnamon.—Stir all well. Dissolve a level teaspoon of soda or pearlash in as much warm water as will melt it, then stir in at the last, and set immediately into the oven, which should be brisk, but not too hot, and bake well. Spice to your taste, as the spices vary in strength.

Potato Pie-Crust.—Put a teacupful of rich, sweet cream to six good sized potatoes after they have been well boiled, and mash fine. Add salt to the taste, *and flour enough to roll out the crust.* Handle it as little as possible. It is better not to put crust at the bottom of a pie if the fruit is very moist, for it will be clammy from the moisture, but let the under crust only cover the rim of the plate. Prick the upper crust to let out the steam, else the juice will run over. This paste is excellent for apple dumplings, or meat pies, and may be eaten with impunity.

Preparing Citron for Cake.—I saw in the Rural an inquiry as to the best way of preparing citron for cake, and I thought I would send my way. I boil the citron, in clear water, until it is clear, or tender; then I have ready a nice sirup of white sugar; I put in the citron, and boil until the sugar has struck through it; I then take it out on plates, to dry slowly, and sprinkle pulverized sugar on both sides, two or three times, until it is dried enough. I then pack it in wooden boxes, with sugar between the layers. It is almost as nice as the citron we buy.

Pickle for Hams.—100 lbs. meat; 9 lbs salt; 5 oz. saltpetre; 2 quarts molasses; 4 oz. pepper; 1 spoonful saleratus.

Another.—6lbs. salt; 3 oz. saltpetre; ½ pint molasses.

Seasoning for Sausages.—40 lbs. meat; 1 lb. salt; 3 oz. pepper; ½ pint pulverized sage.

Cookies.—Rub together, till white, one teacup butter, two of sugar; beat up two eggs and stir in the butter and sugar with a little flour; grate in some nutmeg, and dissolve one teaspoon of saleratus in a cup of sweet milk; mix soft.

Ginger Snaps.—One pound of sugar, 1 do. shortning, one quart of molasses, one tablespoon of ginger, cloves, and cinnamon, and a large teaspoon of saleratus dissolved in hot water.

Molasses Jumbles.—One quart of molasses, one do. butter, one half teaspoon alum, one tablespoonful of saleratus.

The Poultry House.

THE CARE OF POULTRY.

Farmers generally do not pay that attention to poultry that their importance demands. They are treated in general as a necessary evil. Banished from barns and roofs, they have to seek roosts for themselves on trees and fences. This is wrong.—Fowls thus exposed are not so profitable as those that are kept properly housed. They lay but very little, if any, in Winter, when one egg is worth two obtained in Summer. Besides, many of the less hardy fowls die from exposure, and those that live through are very much injured, and consequently do not lay so well next season. In such exposed places they not unfrequently become victims to birds of prey and vermin. The droppings are also lost, being left under trees and along the fences where little or no good is done; whereas, if the fowls are in good roosts, it can be readily gathered and taken to the garden.

Many farmers say they would not have poultry on the farm, were it not to please the "women folks." There are constant complaints against poor Biddy—she scratches up the garden and picks off the young, tender plants. You seldom stop and give her credit for the eggs furnished for your table.—To prevent the mischief in the garden, it is not unfrequently the case that a dark gloomy coop is made and poor Biddy is shut up, on half rations; seldom has fresh water, no lime, fresh meat nor gravel.—The result is that she quits laying. A better way is to have a fence around the garden tight enough to keep the hens from crawling through. Take lath sticks, nail them on the top of the fence for pickets—a four foot lath will make two pickets—nail them on five inches apart, which is close enough; then every stick will guard one foot of fence. The expense is trifling, and you will not be bothered any more by having them destroy the garden. The damage done by them outside the garden won't make you poor. Build a good roost, warm in winter and well ventilated in summer.

If fowls are to be shut up in summer, they should be well watered and fed. Their food should be often changed. Buckwheat, I think, is the best food; wheat screenings are good. I do not like corn for laying hens, for constant food; it does very well to fatten, but hens won't lay well if kept too fat. In regard to the different breed, nearly all the varieties possess some good qualities, but the Mallacca Game, has, I think, more good qualities than any other particular kind with which I have experimented.—*Ira Green, St. Mary's Hospital, Detroit.*

On Raising Turkeys.

Permit me to give between sixty and seventy years of my experience. To take a fair start procure black turkeys, and teach them to be gentle before they commence laying. As soon as they begin to lay, take away their eggs—let their nest egg be a hen's egg. When they have laid out their litter destroy the nest, feed them well, and in ten days or less they will generally commence laying again. Turn those they have laid once or twice a week. When they have the second lot, and want to set, let them have what eggs they can well cover, and put the balance of the first litter under a hen at the same time, or as near as may be, so that they will hatch nearly together. Take the young chicks from the hen and put them all with the old turkey; she will brood them all.

My first and only feed is curd from sour congulated milk, scalded, turned on a seive, or a board will answer, and the whey drained. I do not use any salt or pepper. I keep them in the stable, or on the barn floor, a day or two, and then let them out if the weather is favorable. Put them up every night early, until they are two or three weeks old. By this time they have a habit of coming home, and the grasshoppers and insects have become so large they mostly supply their appetites. See that they come up every night and feed them well in the morning.

By my plan they are three weeks later, but they will go a-head and make up lost time. I would not let them set as soon as they have laid the first litter, if I could have a cart load of eggs given me. —*Cor. Rural New Yorker.*

Hints About Keeping Poultry.—The remark is very often made by those who keep their hens confined in close quarters that they do not lay as well, as when they have their freedom; but I have had no trouble with my hens and they are confined all the time. One thing of great importance is to have their quarters *kept clean*, otherwise the inmates will be unhealthy and will not do so well as when they are out about the premises. Hen houses should be cleaned out as often as once a week, and they should also be provided with fresh earth, pure water, lime or old plastering, wholesome food and the inside of the house should be whitewashed as often as twice each season. Attention to these particulars will give success in poultry raising.—*Cor. Maine Farmer.*

Poultry pick feathers off each other's necks for the purpose of getting the blood contained in the end of the quill. Plenty of fresh chopped meat will stop it at once.

Women should give their hearts, not lose them.

The Dairy.

MANAGING COWS FOR THE DAIRY.

The following, which we find in the *American Stock Register*, is a good article on the subject, according to our view of it. There is much practical sense in it, the writer going at once into the merits of the subject. We should like our experienced dairymen to give us their views on this matter.—Here they ought to be perfectly at home; for if anything about a farm will show system and experimental knowledge, it is the management of dairy cattle:

"I propose to give some hints for feeding cows while giving milk. It may be more profitable to individuals to so feed as to produce the largest amount of milk or butter, without regard to the continued usefulness of the animal as breeders or even milkers, but the country thereby loses the services of many fine breeding anlmals. This will more particularly recommend such feeding as shall promote a flow of milk only so far as is compatible with the continued usefulness of the animals both as breeders and milkers.

"For summer feeding, good pasture with two quarts of meal per day given in two feeds, and made from one-sixth corn, one-sixth rye, and two-thirds oats, will be found more profitable and healthy than grass alone. If the pasturage is short, a great assistance will be derived from green crops, the best is fodder raised from sowing thickly evergreen, sweet or sugar corn. Large crops of this may be obtained either for summer feeding, or to be cured for winter feeding, with comparatively small expense, and where roots are raised with difficulty, this will be found the more profitable; and from a number of years experience with both in raising and feeding, I think the former to be preferred in most localities. It will produce richer milk than any roots except yellow carrots.

"For winter feeding, good clover hay and corn fodder, meal mixed with bran shorts, middling or canail, (the three latter names being given in different sections to nearly the same article and varying in different mills from a very rich to a very poor feed.) Meal from a number of varieties of grain will be found more healthy than from any one kind. That from Indian corn will usually give a large quantity of rich milk at first, but in most cases will soon induce an excess of flesh or fat, and a corresponding decrease of milk. Many valuable cows have been rendered valueless for milkers by one season's high feeding on Indian meal. Cotton seed and oil meal will have much the same effect. Sometimes good cows will show an inclination to take on fat and increase in milk on the commencement of excessive feeding on rich feeds.

"For a cow not in calf, or the first six months she has gone with calf, four quarts per day of one-half middlings, and the oil-meal from equal quantities of corn, rye and oats, will be as much as the average of cows will bear and prove lasting and profitable; it should be given on cut fodder, or cut hay, wet with hot water, so as to slightly steam, and fed in two feeds per day. Where roots can be raised with profit they will be found healthy, and will keep up a better flow of milk than most other kinds of feed, but they should be fed with other kinds.—Wurtzel and beets will increase the quantity, but will not improve the richness, though the flavor will be benefitted. Yellow carrots will give less increase in quantity of milk, but they will improve both the quantity and quality of the butter, making it finer flavored and higher colored. Roots fed in large quantities alone will induce too large flow of milk at expense of condition. One feed of roots and one of meal per day will prove better than either alone. Middlings of bran should be omitted when feeding roots, as both are loosening and may scour. Where there is a tendency to this, oat meal is the best feed, and it may be better to scald it.

"Regularity of feeding is of the greatest importance for all animals, and is never more so than in feeding cows; they should have constant access to salt—rock salt is the best, and Turk's Island the best substitute; if they have it always before them they will never receive injury from over eating.—They should be watered often, and with water not too cold; the better plan is to have such arrangements as will give constant access to it, though if regularity is observed the animal's appetite will soon accommodate itself to stated times. While the aim should be to make cows eat all the hay or fodder they can, they will fall much short of it if they are allowed to waste or are fed more at once than they can eat clean in a reasonable time. Feed oftener and less at a time, and they will eat much more in the aggregate and waste much less. If it is found the supply given is too large it should be removed as soon as the animal has become satisfied, as nothing destroys the appetite sooner than rejected food lying in the manger. For successful winter dairying, a good light, airy and comfortable stable is indispensable; care should be taken to keep it clean and well ventilated, guarding against currents of cold air blowing on the cows and keeping their apartments too close and hot. Close, hot stable foster more diseases than exposure to cold.

"For the treatment of sickness, blood letting and purgatives should be discarded for kind, good and gentle nursing. Many fine animals have been sacrificed to doctoring that would have been useful for

many years had nature not been called upon to combat both disease and debilitating medicines. Instead of purgatives give injections of tepid water or Castile soap suds and bran mashes. If an animal is sick, shorten the feed instead of tempting the appetite with stimulating foods. Keep them quiet, make as comfortable as possible, and otherwise trust to nature if any doubts as to what should be done.—This opinion is formed after many years experience with all kinds of animals where this way has proved by far the most successful after a thorough trial of both kinds and treatment."

FARMERS OUT OF DEBT.

There must be something radically wrong with the farmer that does not now free himself from debt. Never in the lifetime of the present generation will such another opportunity present itself. Every cultivated product of the temperate latitude bears a highly remunerative price. Every fruit of our trees finds ready market. Every domestic animal that roams over our fields or feeds on the contents of our granaries finds a ready purchaser. Animals, vegetables and fruits alike are in demand.

It matters not for the purpose of paying debts, whether the money received for farm products be fifty, sixty, ninety or more cents below par, a dollar cancels a dollar's worth of debt, contracted even in the good old days of specie for which men sigh.—A few years ago, it took, in many parts of the West, ten bushels of corn to bring a dollar. Everything else that the farmer produced by his toil and care was equally low in price. Then indeed were hard times, and a crushing load of debt settled down upon the shoulders of all—for the great mass of Western farmers came here poor in money; rich only in faith and hope.

If a man's crops and stock last year brought him $1000, and his expenses were $500, this year his receipts will be $2000, while his expenditures, even allowing them to have doubled—which they will not have done in one case in ten, will allow of a profit double that of last year.

And what is a year or two of economy now—economy of the most rigid kind, that shall cut off all the luxuries of life, compared with the years of happiness that shall follow when the homestead is free from encumbrance; when all the stock and machinery are the property of the landholders; when there is no account at the grocer's, nor the dry-goods' merchant's, shoemaker's, nor blacksmith's?

It will be a glorious epoch when the people of these prairies own their own farms, and this we believe may at once be, if proper advantage be taken of the times in which we now live.—*Prairie Farmer.*

It is better to make ourselves loved than feared.

The Household.

EXPERIMENTS WITH BABIES.

As the following is literally a "home matter," we give it a place in this column, in the hope that it may serve in some degree, to prevent the cruelties practiced upon "the baby:"

Young mothers and fathers are always trying experiments with babies, and this, perhaps, is the reason why so many first children die. Very young married people feel very much as if their new found treasure was a toy, and go to work playing at mamma and papa, in a manner calculated to make grandmamma's best cap and grandpapa's wig fly off their venerable heads in horror. Sometimes the baby is to be hardened and its constitution strengthened; sometimes it is wrapped in flannel and suffocated in feather beds for the best part of its existence; sometimes it is taught to feed early, and all kinds of indigestible messes provided for it, instead of its mother's milk; sometimes the object is to have it walk early, and its little legs take the form of bows in consequence; sometimes it must not walk at all, and is carried and carted about in a little wagon until it almost loses the use of its limbs, and in any case is generally stripped quite naked, as far as the shoulders and arms go, on all those occasions when it would be "dreadful" to hide beautiful baby in a woollen sacque or flannel shawl. When one seriously reflects upon the general management and many experiments of young parents, the only wonder is that the first baby ever lives to grow up.

Choice Meats, and Cooking.

Choice Bacon should be firm, perfectly round and no rank smell about the bone—the flesh a red color, and fat firm, and of a buffish tinge.

Pork.—The age will be indicated by a thick, coarse rind. Hogs of two years make nicest bacon. The carcass should look firm, clean, and feel stiff and cold—the fat a pure white.

Beef should look red—have a smooth grain, and fat of white. Dark flesh and yellow fat indicate age and toughness.

Fowls.—Turkeys while young have smooth legs and full eyes.

Geese and Ducks will have smooth bills and limber feet when young.

Hens have rough legs and long combs when old.

Partridges have yellow legs when young.

To Make Clear Coffee.—Stir one egg into half a pound of ground coffee, and set away for use as required. No further substance for settling will be needed, and the egg tends to preserve tht aroma.

The Apiary.

UNITING WEAK SWARMS.

"The greatest profit lies in saving bees, not in killing them."—*Edward Prince.*

The old practice of destroying the bees, in order to secure the honey, and thus throwing away all prospect of future gain, for a little present advantage, is not only cruel but wholly unnecessary, and should be discountenanced by every admirer of this untiring little busybody. With regard to uniting light stocks the fall, a noted apiarian says; "two weak families when united, will not consume any more honey than each would if left separate." The reason of this is, a strong colony is able to maintain the proper degree of warmth in cold weather, which greatly lessens the consumption of food. As soon as the autumn frosts have killed the flowers, colonies that are too weak to protect their stores are much exposed to robbery. Such, if in movable-comb hives, may either be strengthened by bringing bees from a distance, (see, "how to collect an apiary,") or two of them may be joined together. If a swarm is brought home from a distance, it should be shaken into a box or upon a sheet, together with the colony to which it is to be united. Sprinkle the bees with sweetened water to keep them peaceable and quiet, and hive as a single swarm. When uniting stocks, standing in the same apiary, open both and smoke them thoroughly. This serves to prevent quarreling, by giving all the same scent. Remove combs with the bees adhering and place them together in the same hive, leaving out the frames containing the least honey. If one of the queens is known to be very old, she may be taken away. After closing the the hive, place it upon the stand previously occupied by the stronger of the united swarms. In uniting bees, it must not be forgotten that, unless carried a mile or more away, they are strongly inclined to return to their old stand. To prevent this, open the ventilation above and below and close the entrance till near sunset. Close it again early next morning, opening it half an hour before sunset to permit the bees to fly. On the morning of the third day blow a little smoke into the hive and leave the entrance open, as the removed colony will not now return to its former stand. New swarms, before being hived, have given up their established location, and two or more of them may be joined together and placed upon any stand desired.

Second swarms are often worth but little, if hived separately. But, if two are united they will seldom fail to fill their hive and be in good condition for wintering. When using the common hive, they should be united if practicable, but with movable-comb hives their issue had better be prevented.

Swarms issuing the same day will unite peaceably, or a swarm may be joined to another that has been hived three or four days; but, after that, a union is more difficult in the common hive. When such swarms do not issue about the same time, so as to be hived together, let them stand in separate hives till sunset. Then place the one first hived upon a sheet, raising the edge of the hive that the other swarm may enter. Bring the other hive and shake the bees out upon the sheet. If the queen is seen, while the bees are entering, she should be taken away, as the other queen may already have become fertile.

If a colony is found to be queenless in early spring, add its bees to some weak stock having a fertile queen. To do this, sprinkle the bees with diluted honey or water sweetened with sugar, which will procure them a kind reception.—*Kings' Bee Keepers Text Book.*

Bees in December.—If the weather has been warm up to December so that the bees have flown freely, and a large number of colonies together, some weak ones may have been robbed. To guard against robbery close the entrance so that one or at most two bees can pass ott at once. If bees were taken care of last month they need but little attention. If left on their summer-stands throw a little prairie or slough hay over except the entrance, to shield them from piercing winds and warm rays of the sun; also the outside bees will be chilled, or if warm they will be excited to come out, and many be lost. Proper upward ventilation must be attended to this month, or many bees will perish.

Storing Corn-stalks.—A farmer said to us the other day that he had been unable to keep well cured corn stalks in a mow when he packed them away solid, but had found no difficulty whatever in keeping them in excellent condition if he set them up on the buts, no matter how closely. They require ventilation, and it is easiest obtained in this way. It is his practice to cut his stalks and bind them in small bundles so that they can easily be handled with a fork, and then he finds no difficulty in storing them compactly, as above described, and having them in condition for cattle to relish when they come to eat them. But he says they cannot be saved stored horizontally.—*Rural New Yorker.*

A Permanent Institution.

We can assure our friends and the farmers generally, that the "Maryland Farmer" is a "fixed institution" for the future. We shall begin the new year, in January next, under the most auspicious surroundings—and would ask our friends to make an effort, in their respective neighborhoods, to increase our list of readers.

Ladies Department.

CELESTIAL FROLICS.

The sun had put his night-cap on,
And cover'd o'er his head,
When countless stars appear'd amid
The curtains round his bed.

The moon arose, most motherly,
To take a quiet peep
How all the stars behaved while he
Her sovereign was asleep.

She saw them wink their silvery eyes,
As if in roguish play;
Though silent all, to her they seem'd
As if they'd much to say.

So, lest their frolics should disturb
The sleeping king of light,
She rose so high that her mild eye
Could keep them all in sight.

The stars, abash'd, stole softly back,
And look'd demure and prim;
Until the moon began to nod,
Her eyes becoming dim.

Then sleepily she sought her home,
That's somewhere—who knows where?
But as she went, the playful stars
Commenced their twinkling glare.

And when the moon was fairly gone,
The imps with silvery eyes
Had so much fun it woke the sun,
And he began to rise.

He rose in glory!—from his eyes
Sprang forth a new-born day;
Before whose brightness all the stars
Ran hastily away.

PRAISE YOUR WIFE.

Praise your wife, man for pity's sake give her a little encouragement; it won't hurt her. She made your home comfortable, your hearth bright and shining, your food agreeable—for pity's sake, tell her you thank her if nothing more. She don't expect it; it will make her eyes open wider than they have these ten years, but it will do her good for all that, and you too.

There are many woman, to day, thirsting for words of praise, the language of encouragement.—Through summer's heat, through winter's toil, they have drudged uncomplainingly, and so accustomed have their fathers, brothers and husbands become to their monotonous labours, that they look for and upon them as they do to daily rising of the sun and its daily going down. Home every day may be made beautiful by the appreciation of its holiness. You know that if the floor is clean, manual labor has been performed to make it so. You know if you can take from your drawer a clean shirt whenever you want it, that somebody's fingers had ached in the toil to make it so fresh and agreable, so lustrous and smooth. Every thing that pleases the eye and the sense has been procured by constant work, much thought, great care, and untiring efforts bodily and mental.

It is not that many men do not appreciate these things, and feel a glow of gratitude for numberless attentions bestowed upon them in sickness and in health, but they don't come out with a hearty "Why how pleasant you make things look, wife!" or "I am obliged to you for taking so much pains!"—They thank the tailor for their "fits;" they thank a a man in a full omnibus who gives them a seat, they thank a young lady who moves along in the concert room, in short, they thank every thing out of doors, because it is the custom, and come home, tip their chair back and their heels up, pull out the newspaper, grumble if their wife asks them to take the baby, scold if the fire has gone down, or if everything is just right shut their mouths with a smack of satisfaction, but never say, "I thank you."

I tell you what men, young and old, if you did but show ordinary civility toward those common articles of housekeeping, your wives, if you would give the hundred and sixteenth part of the compliments you almost choked them with before you were married, fewer women would seek for other sources of affection. Praise your wife, then, for all the good qualities she has, and you may rest assured that her deficiencies are counter-balanced by your own.

THE LOSS OF A WIFE.

In comparison with the loss of a wife, all other bereavements are trifling. The wife! she who fills so large a space in the domestic heaven; she who busied herself so unweariedly for the precious ones around her; bitter, bitter is the tear that falls on her cold clay! You stand beside her coffin and think of the past. It seems an amber-colored pathway, where the sun shone upon beautiful flowers, or the stars hung glittering overhead. Fain would the soul linger there. No thorns are remembered save those your hands may unwillingly have planted. Her noble, tender heart lies open to your inmost sight. You think of her now as all gentleness, all beauty, all purity. But she is dead! The dear heart that laid upon your bosom rests in the still darkness upon a pillow of clay. The hands that have ministered so untiringly are folded, white and cold, beneath the gloomy portal. The heart whose every beat measured an eternity of love lies under your feet. The flowers she bent over with smiles bend now above her in tears, shaking the dew from their petals, that the verdure around her may be kept green and beautiful.

There is no white arm over your shoulder, no speaking face to look up into the eye of love; no trembling lip to murmur, "Oh, it is too sad."

There is so strange a hush in every room; no light footstep passing around. No smile to greet you at nightfall. And the old clock ticks and strikes and ticks—it was such music when she could hear it! Now it seems a knell on the hours through which you have watched the shadows of death gathering upon her sweet face.

And every day the clock repeats that old story. Many another tale it telleth, too—of beautiful words and deeds that are registered above. You feel—O, how often—that the grave cannot keep her.

WOMAN.

Place her among flowers, foster her as a tender plant, and she is a thing of fancy, waywardness and sometimes folly—annoyed by a dew drop, fretted by the touch of a butterfly's wing, and ready to faint at the rustle of a beetle; the zephyrs are too rough, the showers too heavy, and she is overpowered by the perfume of a rosebud. But let real calamity come, rouse her affections, enkindle the fires of her heart, and mark her then; how her heart strengthens itself—how strong is her purpose. Place her in the heat of battle—give her a child, a bird—anything she loves or pities, to protect—and see her in a relative instance, raising her white arms as a shield, as her own blood crimsons her upturned forehead, praying for life to protect the helpless.

Transplant her in the dark places of earth, awaken her energies to action, and her breath becomes a healing, her presence a blessing. She disputes, inch by inch, the stalking pestilence, when man, the strong and brave, shrinks away pale and affrighted. Misfortune haunts her not; she wears away a life of silent endurance, and goes forth with less timidity than to her bridal. In prosperity she is a bud full of odors, waiting but for the winds of adversity to scatter them abroad—pure gold, valuable, but untried in the furnace. In short, woman is a miracle—a mystery, the centre from which radiates the best charm of existence.

Singing at Work.—Give us the man who sings at his work! Be his occupation what it may, he is equal to any of those who follow the same pursuit in sullen silence. He will do more in the same time—he will do it better—he will persevere longer.—One is scarcely sensible to fatigue, when he marches to music. The very stars are said to make harmony as they revolve in their spheres. Wondrous is the strength of cheerfulness—altogether past calculation its powers of endurance. Efforts to be permanently useful, must be uniformly joyous—a spirit all sunshine—graceful from very gladness, beautiful because bright.

It is not less the duty of a prince to obey the laws, than to command over men.—*Democritus.*

HOG-KILLING.

The revolving seasons bring to nearly all of our homes near the close of every year, beyond all comparison the most disagreeable duty that devolves on the housewife, viz., the superintendence of her part of hog-killing.

But use conquers disgust, and that fact, with proper preparation for and systematic arrangement of the work while in progress, makes even hog-killing an endurable business. Indeed, in large families, we think *several hog-killings* desirable, and certainly economical, as many portions of the animal which are considered the perquisites of the pork-house if they slaughter for you, come in excellent place at home, if cared for properly and cooked invitingly. It is a pleasure, beside having your own well-cured bacon, to have a supply of sausages and lard that you can use without any disagreeable doubts of their cleanliness.

Before hog-killing you should have your meat-house and store room in perfect order, and every implement and vessel requisite ready for use. There should be on hand a sufficient supply of salt, saltpetre, ground cayenne pepper, sage, spices, and so on. To have them to hunt up, clean and prepare for use, is a great back-set to work, while perhaps your pork-house is out of doors and rain evidently coming up.

Being prepared in your department, I take it for granted your paragon of a husband has had his pork bred and fed in the most approved style. That during the slaughter a hand has been detailed to look carefully over the heads and feet after the animal has pass off the platform, and after putting them in perfect order, has washed the whole outside of the animal perfectly clean. That a second person, armed and equipped with an abundance of clean water and cloths, has followed the opener and washed out the inside until a search-warrant could find no trace of the murder. In short, that when you see the animal on your meat-house table, you shall have no room to believe that the animal was humanely allowed to keep a part of his natural clothing and have a farewell wallow in his old haunts.—Such pains can be surely taken for home, and such pork we know commands a premium in the family market.

Hogs that weigh about from 250 to 300 pounds, are the nicest for family use. Larger than these are too gross, and do not allow fresh pieces often enough for the table without useless waste. Smaller, there is too much bone, and the meat becomes too dry.

Cutting out Pork.

This work belongs to the male part of the house, and the master or butcher, or some well-trained old family servant, will do it all up without your ever thinking of it—probably.

But lest you should not have had time to train that old man, or your patriotic husband should have gone to the Presidential election, we will give a few breif hints on this branch of the business:

Have the hog laid on his back on a stout table.—Clean the carcass of the leaf fat. Take off the feet at the ankle joints. Cut the head off close to the shoulders, separating the jowl from the skull, and open the skull lengthwise on the under side, so as to remove the brains fully. Remove the backbone in its whole length, and with a sharp knife cut off the skin—then the fat, leaving of it only about one-half inch of fat on the spinal column. The middling or sides are now cut from between the quarters, leaving the shoulders square shaped, and the ham pointed, or it may be rounded to suit your fancy. The ribs are next removed, partially or entirely from the sides. The trimmings of fat from the hams and flabby parts of the sides are rendered up with the back bone strip for lard.

The sausage meat is cut from between the leaf fat and the ribs; any other lean pieces are used for the same purpose. The thick part of the back bone that lies between the shoulders is called the chine; it is cut from the tapering boney end, and the latter part called the back bone by way of distinction.—The back bones are stewed and used while fresh; the chine is better after being smoked.

Salting.

When your meat is to be pickled, it should be sprinkled with saltpetre, and lightly with salt, and drained for 24 hours, then plunged into pickle.—Your hams according to common usage, will be smoked, but we think that to keep at least a portion of the sides in good pickle, is very good policy.—They, after soaking, are much sweeter for cooking with vegetables, and the grease from them when fried out, is much more useful than when they have been smoked.

But to return to the salting. If your meat is to be dry salted, mix one teaspoonful of pulverized saltpetre with every gallon of salt, and keep the mixture warm beside you. Cut off a hog's ear, and with it rub every piece of meat with salt on the skin side until it is moist; then rub the flesh side well with salt, sprinkle it plentifully with Cayenne pepper, especially about the raw edges of the hock, and around the bone. Then pack ham upon ham, and sides upon sides, and so on, for the convenience of getting the different pieces to hang up at the times they will be ready for it. It is likewise best to put large and small pieces in different divisions.—The weather has so much to do with the time that meat requires to take salt, that no particular time can be safely specified as the right one for leaving it in.

After allowing it three weeks to absorb the salt, fry a piece from a medium sized ham; if salt enough, all of that size and smaller are surely ready for drying, and the larger ones can wait a few days. It is well to remember that meat increases in saltiness as it dries, consequently we should not wait until it is quite salt enough before we hang it. The jowl and chine are salted and smoked. The back-bones and ribs are just sufficiently salted to keep; the last, if the weather is freezing or near it, can be kept quite fresh; if the weather is warmish, they should be kept in pickle in preference to dry salt.

Many persons turn over and rub their pork once a week while in salt. We have never practiced this nor ever lost a joint.

When the meat is ready for hanging, the hams should be hung highest, because they are least liable to the attacks of insects, for insects do not so much infest high places—unlike human pests.

A fire communicating with the meat house by a smoke flue, is preferable to any other arrangement for smoking, because it does not heat the room, which by the way is best if lofty, cool, and dark.—We give a receipt for pickle for pork, and some methods for curing bacon, and then retrace our steps back to the slaughter house, as you may have some novice to direct there.

Pickle.

The pickle directed in "the Chapter on Beef" is our favorite, but rather expensive for large quantities of pork We give a good one—many omit the sugar:

Make eight gallons of brine strong enough to float an egg; add two pounds of brown sugar, or a quart of molasses, and four ounces of saltpetre. Boil and skim clean, and pour cold over your meat.

Meat intended for smoking should remain about four weeks in this pickle. The pickle should be boiled over two or three times during the warm months, and a cup of salt and sugar added. Some persons allow as much pearl-ash as saltpetre for their pickle. We are decidedly opposed to it, thinking it impairs the flavor and color of the meat.

English Receipt for Curing Bacon.

So soon as the meat comes from the butcher's hand, rub thoroughly and fill every crevice with fine salt. Next day scrape off the salt not absorbed, cleanse out the vessel, and salt the pork as before: repeat this three days. The fourth day use pulverized saltpetre with a handful of common salt—one quarter of a pound of saltpetre to seventy pounds of meat. Then mix one pound of coarse brown sugar, one pint of common molasses, and pour over the saltpetre; repeat this four times a day for three days and then twice a day for a month. Smoke with maple or hickory chips, or clean fresh corn cobs.

And now to begin with the beginning of our own proper department of womanly labor. There should be ready an abundant supply of clean hot and cold water, tubs, buckets, cloths, and so on.

A long stout table for the ridders to stand by, a large tray in which to receive the entrails as they fall from the cavity of the animal's body. The opener should hang the liver, &c., on a pole, for purposes to be hereafter mentioned. The ridders should proceed as rapidly and carefully with their business as possible; it is easier done while the intestines are warm. The melts and sweet-breads should be cut off and thrown into a vessel kept convenient for the purpose. Then clear the maw of fat; next strip the intestines, being extremely careful not to cut them and so soil the grease

The thin gauzy parts called *veils*, should be thrown into one vessel of cold water, the *capes* into another, and the strippings into a third. A hand not engaged in the stripping should open and empty the maws and large intestines to be used for chitterlings or soap grease. You may empty and save as many of the small red skins as you wish to prepare for stuffing sausage in.

Close your day's labor by having all your fat washed through two or three waters, and put to soak for the night. Do the same office for your chitterlings and sausage skins.

Your first care the next morning is your lard.—Render up the gut fat first; having washed it clean,

put it into kettles separated as the day before, or else having cut it up very finely, which is best, otherwise being of unequal bulks it will render up unequally. You may use a brisk fire until the water is nearly out; when the cracknels are brown and crumble easily, or when the lard will sputter when water is dropped in it, it is done. Strain it off into a kettle to cool; then put it in any vessel you choose, that will keep it close. Hot lard will melt tin or leak through the best wooden vessels. Leaf lard, if possible, should be so handled as not to require washing, as the use of water greatly increases its chances, for becoming rancid; nevertheless, as purity lies at the bottom of good housewifery, it must be clean if it passes through a dozen waters. It is best also to put a ladle of lard at the bottom of your kettles instead of water, to prevent the fat from scorching. Leaf-lard must be rendered up slower than gut fat, as it is easier burned; it should be cut up into thin slices and rendered by itself. The strip which comes off the backbone, and other trimmings, should be skinned and cut up small; they make good lard, but render up slowly. The practice of putting ley into lard, which begins to prevail in the country, bleaches but impairs its quality. Subject your cracknels to the strongest possible pressure.—It is wonderful how much lard they will give out. A patent cider-press answers well for this purpose. Save them up carefully; they shorten a favorite corn-bread, make the best of soap-grease, and are a remunerating treat to your poultry.

When you have finished up your lard, throw into your kettles all the skins and fat from around the kidneys, which is usually wormy. Strain the grease from it carefully, and it will answer well for dressing your wool, making candles, nice soap, or any purpose for which number two lard is used.—Also slice up the kidneys, livers and hearts into a kettle, with enough salt to keep them, and a bountiful allowance of red pepper; boil them down into a soft crumbly mass, and keep them for the hardest winter weather for your fowls.

Sausages.

Wash your sausage meat in tepid water, but do not soak it. See that it is free from bone, sinews, gristle, &c., &c. Cut it up in small pieces; to 3 lbs. lean meat allow one pound of the leaf fat; chop or rather grind it very fine. To this quantity allow 3 oz. salt, ½ oz. of ground black pepper, 1 tablespoon of powdered sage. When well mixed, cook and try one of this batch before you season another; it is easy to add seasoning, impossible to take it out, therefore be cautious in using it. Remember your sausage becomes more salt as it dries. Add any spice you like.

Bologna Sausage.

This is made by using one-third of lean beef, seasoning more strongly, and *boiling after stuffing*, before drying.

Sausage Skins.

These are prepared by repeated soakings and washings. Then being turned, they are scraped so free from their slimy coat that when blown up they are perfectly white and nearly transparent. They are again soaked in salt water several days, the water being changed daily, and are then filled with sausage meat by some of the various implements devised for that purpose.

Bladders.

These are cleaned by the same process, and are extensively used in the preservation of lard in some pork-houses—they would doubtless answer an excellent purpose for keeping sausage meat. The large intestines of the hog is best for stuffing sausages, but more difficult to clean perfecfly.

Black Pudding.

This most unchristian article of diet is made by stirring corn-meal into fresh hogs blood. It is seasoned with salt, pepper, and spices, stuffed and cooked as sausage. It is eaten with great gusto by some persons.

Chitterlings.

These are prepared by cleaning the maw and large intestines of the hog. Quicklime sprinkled thickly over the slimy coat, will soon enable you to rid them of it. Having soaked them and washed them until perfectly inodorous, you may drop them in pickle, and use them as you would beef tripe.

The liver, hearts, heads, sweet breads, &c., if not put up for the fowls, may be slightly sprinkled with salt, and are justly esteemed table luxuries.

Feet.

Under an other head we have said we considered it as good a plan as any to salt down the feet; however, previous to salting or pickling, they should be carefully examined, the hoofs removed, not a hair left; be scalded, scraped and soaked until perfectly white. If wanted for immediate use, they will be ready for boiling after laying a night in strong salt water. Many persons boil the feet until perfectly tender, and keep them in cold spiced vinegar, ready to use cold or fry. This is termed souse. Others boil some heads and feet together, until they can be freed from bones and mash to a pulp; this is seasoned with salt, pepper and spices, moulded and kept in vinegar; this is termed pork cheese. Finally, to close your hog-killing without waste, the maws, larger intestines, &c., not prepared for chitterlings, should be boiled in a kettle of weak ley until the grease from them rises to the surface. When cold take it off for dirty grease. The hair of your hogs should be saved for mixing mortar, or with proper preparation makes a good mattrass, or with the bones may be sent to the compost heap.—A HOUSEKEEPER *in the Country Gentleman.*

Our Receipt for Curing Meat.

To one gallon of water, take 1½ lbs. of Salt, ½ lb. of Sugar, ½ oz. of Saltpetre, ½ oz. potash.

In this ratio the pickle to be increased to any quantity desired. Let these be boiled together, until all the dirt from the sugar rises to the top and is skimmed off. Then throw it into a tub to cool, and when *cold*, pour it over your beef or pork, to remain the usual time, say four or five weeks. The meat must be well covered with pickle, and should not be put down for at least two days after killing, during which time it should be slightly sprinkled with powdered saltpetre, which removes all the surface blood, &c., leaving the meat fresh and clean. Some omit boiling the pickle, and find it to answer well; though the operation of boiling purifies the pickle by throwing off the dirt always to be found in salt and sugar. If this receipt is properly tried, it will never be abandoned. There is none that surpasses it, if so good.—*Ger. Tel.*

To MAKE SAUSAGES.—For fifty pounds of meat add 2½ ounces allspice, 20 ounces of salt, 3 ounces black pepper, 2½ ounces of ginger, 2½ teaspoonsful of cayenne pepper, 2½ ounces of salpetre, 1 ounce of sage.

SPECIAL NOTICES.

How to Treat Frozen Limbs.—The New York Evening Post, in an article on this subject, says that frozen limbs should never be rubbed. The juices of the fleshy tissues, when frozen in their minute sacs or cells, at once become in each of these enclosures crystals, having a large number of angles and sharp points; and hence rubbing the flesh causes them to cut or tear their way through the tissues, so that when it is thawed, the structure of the muscle is more or less destroyed. The proper mode of treatment is thus stated:

When any part of the body is frozen, it should be kept perfectly quiet till it is thawed out, which should be done promptly. As freezing takes place from the surface inwardly, so thawing should be in the reverse order, from the inside outwardly. The thawing out of a portion of flesh, without at the same time putting the blood from the heart into circulation through it, produces mortification; but by keeping the more external parts still congealed till the internal heat and the external blood gradully soften the more interior parts, and produce circulation of the blood as fast as thawing takes place, most of these dangers are obviated.

Iron for Peach Trees.—The scales of iron that accumulate around the anvil of a blacksmith's shop are more valuable than manure for peach trees. A shovelful put around a healthy peach tree will be very likely to keep it in good condition; and it is said that trees already diseased have recovered by the application of these scales. Iron in any form will answer a good purpose.

One of the most susceptible plants to manure is the cabbage. It requires a rich soil.

SPEED THE PLOW.

God Speed the Plow! may Agriculture thrive,
And Art and Science flourish; Commerce grow
Healthy and strong; nations the sword forego,
That enmity may die, and man survive!
Another Tyneside welcome we award
The friends of peace and progress—by whose aid
The plowshare shall supplant the battle-blade,
And Right, instead of Might, be sceptred lord!
But, mid our jubilations, lets us pray
For other lands—by ruthless conflict torn—
That soon the advent of a brighter day
May be vouchsafed to "comfort those that mourn,"
Till earth—by war long stricken and opprest—
Throughout the after ages shall have rest!

Newcastle-on-Tyne, July 16, 1864. James Souter.

Hall's Journal of Health for November has been received—it needs no recommendation from us. Edited by Dr. W. W. Hall, New York, and published at $1.50 per year.

Things Founded on Reason.—The ideas of superiority felt by a man in a big steamboat over another in a little steamboat.

The contempt a man who is going a whole route in a stage feels for one who gets in to ride only a few miles.

The dislike a person experiences against a stranger who wears his hat rather to please himself than anybody else.

The pride of a gentleman in the boxes at theatre over one in the pit.

The credit you award to a shopkeeper when he assures you on his "honor" such an article cost him so much.

The great Duke of Wellington constantly asserted that nothing was worse than a *little* war. There can be no success unless you are in earnest.

The Toronto Globe says it has been estimated that the crop of barley in Upper and Lower Canada is about 6,000,000 of bushels, and of this at least five-sixths must find its way into the American market.

Never under any circumstances assume a responsibility you can avoid consistently with your duty to yourself and others.

Lace and Muslin Curtains.—After washing and starching them it is much better to stretch them upon a sheet fastened to the carpet than to iron them. They must be pinned to the sheet very carefully.—The pins should not be more than four or five inches apart. Although this is a good deal of labor, the improved appearance of the curtains is a full compensation. Shetland shawls can be dried in the same way.

Hold the gifts of Fortune so as to be ever ready to give them back to her.